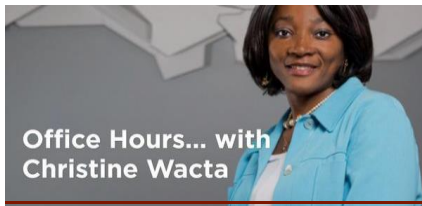


# CHRISTINE C. WACTA Ph.D.

Assistant Professor @ GA Southern/School of Human Ecology. Architect D.P.L.G, Urban Designer



Office Hours... with  
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[www.geoedugaming.org](http://www.geoedugaming.org)

## SUMMARY

As a Visionary leader with 18+ years of experience in teaching architecture, interior design, urban design, digital media, and visualization across diverse disciplines in national and international settings, I have a track record for my contributed effort in using GIS for informed Design making.

My passion, hard work, creative methods in research/teaching and the ability to reach across disciplines for collaborative teaching and research opportunities are some of my qualities. I have an insatiable thirst for innovative visions, creative and evolutionary thinking.

My research interest in advanced Geo-Spatial Sciences has afforded me to have a unique look into the urban complexity from the lenses of the designer, storyteller, and scientist. My interest for intelligent city and resilience for future city planning resulted in co-founding a *Geo Spatial DATA generator company (geoGen) in 2017* and a *GeoSpatial curriculum development (GeoEduGAMING) in 2020*.

I do believe that there is an emerging new discipline a long-side architecture and urban design; a discipline that emerges as a STRONG-LINK to all other disciplines on a single, collaborative TRANS/CROSS-disciplinary platform.

## EDUCATION

**2015 - 2019** Ph. D with focus in Geo-Spatial Information Sciences for Architecture, Urban Design, Landscape and Heritage: *Title : VERS LA « VILLE NEURO-PROTHÉTIQUE » DU FUTUR ; une maquette numérique de ville renseignée comme plateforme d'échange et de croisement d'applications intégrant des données en temps réel et sur un support topographique de référence permettant une approche urbaine holistique qui intègre pleinement les questions socio- culturelles, économiques, politiques et environnementales nécessaires dans une conception urbaine de ville intelligente.*

"Université de Sorbonne Paris Cité & Paris-Diderot", France.

**1998 – 2001** M. Arch. University of Minnesota, focused in 3D animation & Visualization.

Thesis project description: *Fold & Go*: Design of nomadic dwelling for people with fast-changing lifestyle and whose life requires frequent dislocation and relocation. The design and modeling used advanced tools, (with sound effects) and Green Screen. a 13:45 minutes video.

**1993 - 1997** Architect D.P.L.G.

Ecole D'architecture de Paris-La-Défense, France.

French Licensed architecture degree

**1990 - 1992** D.E.F.A in Architecture

Ecole D'architecture de Paris-La- Défense

French Associate Degree in Architecture

## TEACHING EXPERIENCE

**2019-** Program coordinator for Online Construction Management program at *Rowan College at Burlington*.

**2018 - Present** Geo-spatial Designer for Online course development. Ohio University.

**2004 - 2018** Professor; Architecture Interior Design, Urban Design, Collaborative studio.

*Savannah College of Art and Design (SCAD)*

**List of Courses Taught at SCAD (Listed by course numbers)**

**School of Building Arts** [Architecture, Urban Design, Interior Design, History Preservation, Architecture History, Furniture Design]

### UNDERGRADUATE:

#### **DRAW 100: Drawing I: Form and Space**

Students learn basic skills and techniques for drawing from direct observation using subjects such as still life, landscape, and architecture. The depiction of form, light and spatial depth is emphasized along with accurate proportion and scale. Research tools such as thumbnail sketches, quick studies, sketchbooks, and digital resources are used to develop ideas. Analysis of drawings, critiques and classroom discussions build vocabulary and enrich the students' understanding of drawing.

#### **DSGN 102: Design II: 3-D Form in Space**

Students work with a variety of media and complete sculptural and architectural projects to learn how to manipulate 3-D forms and space. Creative problem-solving skills, including research, idea generation, support drawings and maquettes, are used to develop concepts and design plans.

The **Geo Design** concept and its broad application in the use of BIG DATA, Science and algorithm seems to provide a platform that augments Architects, Planners and Stake holders' ability to make better decisions in the creation of more RESILIENT future Cities.

My vision is one of the city as a research and testing laboratory for simulating scenarios using real data in form of a game with Geo location and temporal component. "**Gamifying** the city?" a platform where:

**AR/VR** becomes an important part of immersive and intelligent urban planning for RESILIENCE.

Few of my strongest qualities as a visionary leader include (and not limited to)

- **A diversified background** in Architecture, Interior design, urban design, history preservation, Geo Design, digital media, and visualization; distinguished for entrepreneurial and cross disciplinary collaboration mindset, creative problem solving, cross-functional teams and innovative.
- **To Encourage innovative solutions to design challenges** and leverage decisiveness to implement solutions through suitability analysis while minimizing risk and maximizing performance.
- **Motivator** and mentor combining Design /planning with game as ways to bring awareness to the environmental threats with analytical depth to align stake holders' visions with the need of "**the people of the place**".

## CORE COMPETENCIES

Strategic Transformations Lead.

- Creative and strong program builder with Global aspirations.
- Program Development
- Project Management
- New Business Creation and Development
- Transition /Flexibility
- Continuous Improvement
- 

The integration of presentation options and craftsmanship with the concept is emphasized. The analysis and critique of three-dimensional work develops vocabulary and critical thinking skills. Prerequisite(s): DSGN 100.

### **DRAW 115: Graphics for the Building Arts**

This studio course introduces students to the technical graphic representation techniques of design utilized within the building arts professions, as well as teaches drawing as a tool for thinking. Lectures and studio projects examine the language of three-dimensional form and deal with a wide range of analysis and representation of form, including mechanical drawing, freehand sketching and various means of rendering. Prerequisite(s): DRAW 100.

### **DSGN 223: Architectural Fundamentals Studio I: Form, Space and Order**

Students develop model-building and diagramming skills and produce a portfolio in this studio. The course introduces the formal and typological orders of architecture with emphasis on the comprehension of delineators of space as abstract entities and on the theoretical development of design concepts. A sequence of exercises guides the transformation of basic design into elementary architectural design and progresses from a single space and its adjacencies to sequences of spaces with specific functions. Exercises also involve the typological analysis of notable works of architecture. Prerequisite(s): ARCH 101, DSGN 102, DRAW 115.

### **DSGN 224: Architectural Fundamentals Studio II: Site as Design Generator**

This studio introduces the Dynamic Orders of climate, time, activity, light and space in relationship to building and landscape that influence the building form, envelope and orientation. Reciprocities between landscape and building include approach to and entry into a building, as well as qualities of light and prospect from within the building. Students are introduced to vertical circulation systems and the tectonic nature of floor, wall and roof enclosures. Students continue to develop design through handcrafted drawings and models and produce a portfolio of the process and design. Prerequisite(s): DSGN 223.

### **DSGN 225: Architectural Fundamentals Studio III: Spatial Relationships and Human Response**

This studio investigates the Perceptual and Experiential Orders and dynamics of choreographed movement through sequences of architectural space, which impact the visual, haptic and auditory senses. In addition, the perceptual dynamics of configuration, light, view, frame, image, motility, posture, surface and transparency within architectural space at various scales of investigation are explored. Conceptual Orders also address the significance of meaning, symbol, and content in architecture. Prerequisite(s): DSGN 224 and architecture, preservation design or interior design major or minor.

### **ARCH 101: Introduction to Architecture**

This course introduces students to the theories and profession of architecture and encourages creative and analytical thought. By considering the entire scope of the discipline and the profession, the course focuses on developing an ability to ask appropriate questions in relation to decision making regarding the built environment. Students explore the abstract, spatial, social/cultural, environmental, and tectonic concepts that affect the built environment.

### **ELDS 225: Electronic Design I: Digital Communication for the Building Arts**

This course introduces students to personal computer usage related to the building design professions. It covers the use of network operating systems, operating systems, email, word processing, digital manipulation of scanned images, 2-D drafting, and 3-D modeling to communicate building-oriented form. Prerequisite(s): DRAW 115 or FURN 232.

### **ARCH 241: Construction Technology I: Building Materials and Assemblies**

- Strategic Partnership and Relationship Builder
- Strong Research and Collaborative mindset.
- Community Strengtheners
- Team Building & Training.

## PUBLICATIONS

### November 2020 Scientific Journal.

Volume 82 (2020) SHS Web Conf.,

SCAN'20 - 9e Séminaire de Conception Architecturale Numérique. Article n. 04003, 12 pges

Section : Enseignement et méthodologie de la conception : Dispositifs d'enseignement. DOI <https://doi.org/10.1051/shsconf/20208204003>

**Encyclo**, Revue de l'École doctorale ED 624 Sciences des Sociétés (SDS). n° 11. 2020

« L'interdisciplinarité chez le jeune chercheur en sciences sociales » <http://ed382.ed.univ-paris-diderot.fr/L-interdisciplinarite-chez-le-jeune-chercheur-en-sciences-sociales>

**Spring 2018, ArcUser Journal:** "Coming Together to Design Resilient Communities." Pge. 22.

<https://www.esri.com/about/newsroom/arcuser/coming-together-to-design-resilient-communities/?rmedium=arcuser&source=https://www.esri.com/esri-news/arcuser/spring-2018/coming-together-to-design-resilient-communities>

**Spring 2018, ArcNews Journal.** "GIS News and Insights"

GeoDesign, step up to shape the future:

Interview on the topic of the need of science in design process and education.

<https://www.esri.com/about/newsroom/arcnews/geodesign-steps-up-to-shape-the-future/?rmedium=arcnews&source=https://www.esri.com/esri-news/arcnews/spring18articles/geodesign-steps-up-to-shape-the-future>

**2011 SEMAPA Magazine #7 May to June** (Paris 13th arrondissement) ; article about the SCAD students visiting Paris **SEMAPA**.

**2003** Art Institutes International Minnesota's **Quarterly Newsletter**, **Vol 4, Issue 1. February 19, 2003, 2003, 2.**

**2002 University of Minnesota's** record book of the study Port Cities' abroad program.

This course introduces building materials and their use in wood and masonry construction. The course also promotes an understanding of the various constructed assemblies both structural and nonstructural that, when combined, form a complete building.

Prerequisite(s): ARCH 101 or INDS 110 and DRAW 115.

### ARCH 301: Architecture Design Studio I: Human-centered Design

This course is the first in a sequence of architectural design studio courses designed to develop students' abilities to create meaningful architectural design solutions. In this course, students solve simple architectural design problems. The course concentrates on the ways in which basic human factors affect and inform architectural design. Lectures include topics such as behavioral aspects of design and human aspiration.

Prerequisite(s): COMM 105, ARTH 110, ENGL 123, MATH 201, PHYS 201, ARLH 206, ARLH 208, DSGN 225, ELDS 225, ARCH 241.

### ARCH 302: Architecture Design Studio II: Site and Environmental Context

This studio course concentrates on the ways in which a building's site and environmental context influence architectural design. Students conduct simple site analyses and make design decisions on that basis. The ability to create meaningful design solutions and fulfill simple programmatic requirements also is emphasized. Lectures include topics such as environmental and site issues and the meaning of places.

Prerequisite(s): ARCH 301.

### ARCH 303: Architecture Design Studio III: Structural Applications

This studio course concentrates on the ways in which the nature of structural systems, including long-span structures, affects and informs architectural design. Students design projects that address tectonic and structural issues. Lectures include topics such as structural systems and the tectonic language of architecture. Prerequisite(s): ARCH 302.

### ARCH 341: Construction Technology II: Building Systems and Technologies

This course builds upon information introduced in Construction Technology I by emphasizing the various existing and emerging technologies, materials, assemblies, and their characteristics. The influences of building codes, industry standards and programmatic requirements on the selection of both structural and nonstructural elements are discussed. The course also introduces students to construction drawings and detailing and develops an understanding of the relationship between drawings and specifications. Prerequisite(s): ARCH 241.

### ARCH 404: Architecture Design Studio IV: Urban Context

This studio course concentrates on the issues raised by creating new architecture in existing high density urban contexts with complex social and cultural characters. The course focuses on creating well-developed and meaningful solutions to complex architectural problems in the urban environment. In addition to performing in-depth analysis of the urban site and the functional program, students prepare formal building type analyses as a way of understanding the tradition of building in the city. Students learn how to design buildings with vertical circulation systems and understand the issues related to multi-story architectural solutions. Lectures include topics such as urban context; social and cultural issues related to dense urban settings; vertical circulation systems; and analytical methods for understanding the urban setting. Prerequisite(s): ARLH 211, ARCH 303, ARCH 319, ARCH 341, ARCH 361, social/behavioral sciences elective.

### ARCH 405: Architecture Design Studio V: Capstone I - Research and Schematic Design

This studio course addresses complex architectural problems in large non-urban and natural sites with topographic variation. Projects include a variety of building types with complex functional programs and structural systems. In addition to performing in-depth analysis of the natural site and functional needs, students develop building programs as a way of understanding the relationship between analysis, synthesis and communication throughout

**2001 Thesis Book for M. Arch.**  
(architecture library University of Minnesota).

*"Integration of Technology to Architecture "* **Fold and Go; a house for a déraciné** ". 78 pages.

## ONLINE ACTIVITIES & SPOTLIGHTS

**March 2018, Forbes Journal:** Jack Dangermond, CEO of ESRI, discussed my integration of BIG DATA and science into architectural studio at the Savannah College of Art and Design; as a result of my presentation February 28<sup>th</sup> 2019 GeoDesign Summit, Redlands, CA.

<https://www-forbes-com.cdn.ampproject.org/c/s/www.forbes.com/sites/esri/2018/03/05/geodesign-elevating-planning-and-design-decisions-to-future-proof-outcomes/amp/>

**ESRI NorthStar: Career in GIS. July 15th, 2020.**

<https://fb.watch/6iYBgVfeXp/>

**ESRI User Conference: Diversity and Equity-Inclusion-racial-Justice. "Black in GIS".**

<https://www.esri.com/arcgis-blog/products/arcgis/announcements/recap-diversity-equity-inclusion-racial-justice-at-the-esri-user-conference-2020/>

**ESRI User Conference DAY 2: Homecoming: GIS CAN LOOK LIKE YOU. July 13th, 2020.**

<https://www.critigen.com/event/esri-homecoming-day-2/>

**Women's entrepreneurship in Savannah, GA. 2019**

<https://www.facebook.com/createvecoast/photos/gm.533041737035888/10159545996970511/?type=3&theater>

**March 2018, ARCWATCH:**  
**"GeoDesign, Time to Shine"**

*GeoBIM, BIM and GIS*

<https://www.esri.com/about/newsroom/arcwatch/geodesigns-time-to-shine/?rmedium=arcwatch&rsource=https://www.esri.com/esri-news/arcwatch/0318/geodesigns-time-to-shine>

**SCAD Presidential Fellowship 2018**  
was awarded for a project titled "Urban Body/Urban System:

<http://www.scad.edu/blog/office-hours-christine-wacta>

the design processes. Students are expected to apply LEED design guidelines to their projects. Lectures include topics such as methods for site and program analysis; topography; design methods and processes in natural or rural sites; global environmental issues and sustainable architecture. Prerequisite(s): ARCH 404.

### **ARCH 406: Architecture Design Studio VI: Capstone II - Comprehensive Design Development**

This studio course focuses on building systems analysis and integration. It involves adaptive reuse of existing structures and work with a real client to develop a program of moderate complexity that responds to project objectives and exceeds the client needs. Students are required to make decisions relative to the client's needs and desires and respond to the various requirements of users, stakeholders and the public domain.

Students are expected to develop the ability to make theoretical and technical judgments with confidence and produce sophisticated design solutions. Lectures include topics such as the client's role in architecture; materiality; environmental control systems; building service systems; adaptive reuse; and community and social responsibility. Prerequisite(s): ARCH 405.

## **GRADUATE:**

### **ELDS 720: Geospatial Analysis and Digital Design for Urban Environments**

This course provides experience with the use of computers for assessment and representation of the environmental landscape, as applications to urban design and development through appropriate systems and software. Data collection, assessment and synthesis are incorporated as a component of the urban design and development process.

### **URBA 725: Urban Ecology**

This course studies the city from the perspective of ecology. Water, soils, vegetation and urban infrastructure are understood as ecosystem networks and potential determinants of energy flows. Best practices in landscape urbanism are studied. Zoning, density, land-use patterning and infrastructure design, adaptation and renewal are evaluated for sustainability and livability. New Urbanism, landscape urbanism and other contemporary practices in urban design are studied and evaluated.

### **URBA 729: Graduate Urban Design Studio II: The Scale of Town and City**

This course investigates an existing city/town. This may include the inner city, the central business district and fringe or transitional districts. Students analyze residential and mixed-use prototypes, the role of the community and public policy, and the process of developing a program and financial model. Prerequisite(s): URBA 709.

### **URBA 739: Economics of Urban and Regional Development**

Students gain an advanced understanding of urban and regional economics in this lecture course, including the theories of regional growth and urban development. Through rigorous study and application, this course also provides a framework for understanding regional economic development and the regional development planning process, with a focus on public/private partnerships and public financing.

### **PRES 741: Entrepreneurship for Community Revitalization**

Preservation designers offer communities proactive strategies to enhance historic and cultural resources in response to economic and social change. In this course, students examine place-based development to encourage sustainable, responsible growth while effectively preserving heritage. Through the exploration of entrepreneurial strategies for real estate investment, financing and development, students explore creative revitalization tools that build social and economic value for communities. Prerequisite(s): BDAL 701, PRES 710.

### **ARCH 765: Emerging Urban Issues**



## Proposal for the annual

**SXSW\_Panel:** Work in collaboration

Title: *FROM HOLLYWOOD TO HOLLY SEE; BIG DATA IN AR/VR DESIGN. Not finalist at this event.*

<https://youtu.be/RkgDVp98fEE>

## Cameroon Urban Spatial:

Using Geospatial science to for suitability study in urban planning for city planning in Cameroon, Africa. June 2019.

<https://vimeo.com/user88505747>

Proposed Rail TOD. April 29<sup>th</sup>, 2019

<https://commre.maps.arcgis.com/apps/Profile/index.html?appid=0666851bfb04afa8a5f39695112713a>

QR CODE =>



**Yearly convention for "Municipal Association's small cities "Rapid Fire" training session speaker:** presenting how small communities can be SMART using available resources and existing technology at Georgia. June 24<sup>th</sup>, 2019

<https://www.linkedin.com/feed/update/urn:li:activity:6547872160835346432>

## SPEAKER/ PRESENTER

### 2021 GEODESIGN SUMMIT

[https://youtu.be/hEc4JD\\_93FY](https://youtu.be/hEc4JD_93FY)

### ESRI France and SIG TV Octobre 2020

[https://www.sigtv.fr/CLUB-SIG-replay-de-l-emission-du-jeudi-15-octobre-en-direct-de-SIG-2020\\_a1251.html](https://www.sigtv.fr/CLUB-SIG-replay-de-l-emission-du-jeudi-15-octobre-en-direct-de-SIG-2020_a1251.html)

### July 16, 2020, ESRI User Conference; "Black in GIS"

<https://www.facebook.com/gisNorthStar/photos/a.129867258697200/152118503138742/?type=3&theater>

### July 16, 2020, ESRI User Conference; "GIS Can Look Like You! Careers in GIS"

<https://youtu.be/SJtqASBc5gM>

### 2019 IGC International GeoDesign Conference; Redlands, CA.

Event attended by universities around the world GeoDesign.

<https://www.igc-geodesign.org/2019-20-presentations>  
<https://www.igc-geodesign.org/>

This seminar examines pressing contemporary technological, cultural, theoretical and economically driven issues relevant to urban design and development. Emerging issues for the 21st century include the sociological impact and infrastructure needs attendant to vast ethnic migrations, the rapid growth and sprawl of mega cities, and the creation of new cities.

### ARCH 760: Sustainable Design

This course provides an overview of critical developments in sustainable building design strategies by examining environmental problems and possible solutions through design. Readings, lectures, guest speaker presentations and class discussion introduce students to the needs and possibilities of being effective green builders and architects.

### ELDS 775: Simulation, Animation and Visualization in the Building Arts

This course explores the methodology involved in applying electronic simulation and communication tools to the design process. Students are expected to learn in-depth techniques for 3-D modeling, applied knowledge on simulation-orientated rendering and animation tools and digital image manipulation tools. Students produce presentations for the three phases of an electronic design process programmatic, schematic and design development. Prerequisite(s): ELDS 704.

### ARCH 717: Graduate Architecture Studio I: Urban Design and Development

This studio course investigates sustainable strategies for the neighborhood, city and mega-city. Students consider historical patterns of urban settlement and form-making, contemporary forces impacting cities worldwide, and the legal and financial framework of urban development retrofitting the city for ecological solutions. This study includes development of strategies ranging from publicly funded infrastructure, including application of landscape, through privately funded development of public space. Student teams analyze and diagram both physical and social contexts to develop typologies and plan concepts portrayed through master plan and perspective scenarios.

### ARCH 727: Graduate Architecture Studio II: Comprehensive Design and Programming

This studio course emphasizes holistic and integral architectural design. The course reinforces the conceptualization process introduced in earlier studios and integrates knowledge gained in other architecture courses. The studio requires students to advance their architectural design skills to include the highest achievable level of detail in a moderately complex architectural problem. Students are expected to develop the ability to make theoretical and technical judgments with confidence and produce highly sophisticated design solutions. Lectures include topics such as programming; materiality, details, and connections, building systems integration, energy simulation and construction cost control. Prerequisite(s): ARCH 717.

### ELDS 727: Advanced Digital Applications for Practice and Project Management

Students apply the principles of practice and project management regarding product and/or building documentation in this course. By utilizing Building Information Modeling software, students produce documentation of both construction processes and design details utilized within the building and product design practices. Students also master evaluating documentation through an advanced focus on assessment and analysis.

2001 - 2004

Interior Design instructor.

The Art Institutes International Minneapolis, MN

### Classes taught:

**1. Fundamental of Design-** 1st quarter students.

**Course description:** Use of the elements and principle of design to cover an idea or concept visually.

**2. Drawing and perspective-** 1st quarter students

### 2018 ESRI, Geo Design Summit:

"Augmenting Geodesign Experience"

<https://proceedings.esri.com/library/userconf/geodesign18/index.html>

May 2018: CNU "Congress for New Urbanism" in Savannah

"Engaging the Unlikely."

<https://www.planning.org/events/activity/9147171/>

May 2nd to 4th. 2018

ESRI Southeast User Conference in Charlotte NC.

Topic: "3D GIS for Smart, Sustainable & Resilient Communities"

Feb- 2018 AR/VR Tech that Disrupts the Status Quo panel.

<https://youtu.be/VHnsg8KJTqo>

2018 GeoDesign Summit ; Redlands, CA.

"Gamifying the City";

GeoDesign as a FACILITATOR and STRONG link for a Cross Disciplinary EMERGING New discipline.

Jan 23, 2019: Creative Tech Talks for Students: Panel » Telfair Museums, Savannah GA.

Learn about STEAM careers from experts who will give short presentations on their current projects.

<https://www.telfair.org/event/creative-tech-talks-for-students-panel/>

December 29th, 2017: Interview at the WSAV

"Women entrepreneurs in the United States — the highest percentage since 1996. In **SHE HUSTLES**."

<http://www.gnattysavannah.com/2017/11/16/business-hustles-bull-st-labs/>

<https://www.facebook.com/creativecoast/photos/gm.533041737035888/10159545996970511/?type=3&theater>

July 10-14th 2017- ESRI User Conference, J San Diego California.

Exposed Collaborative work done in collaboration with 5 majors at SCAD.

3. **Basic AutoCAD** - Third - Fourth quarter students

4. **CAD Application/3D** - seven to twelve quarter students

5. **Mixed Media** - fourth to twelve quarter students

6. **Intermediate drawing** – second to fourth quarter students.

7. **Color and Design**-In this course, basic color principles including line, hue, value, and intensity are studied. Students investigate color and its relationship to composition through harmony and contrast in a variety of formats and media.

8. **Basics of Interior Design.**

9. **Lighting Design.**

**COURSE CREATED:**

9. **Kitchen and Bath Design;** Online Course

Course description: A study of residential environment with emphasis on kitchen & bath Design. Design program at the Art Institutes.

Created and facilitated this course **Online** for the interior The

Course started Summer of 2004 and was taught Online.

## ACTIVITIES & COMMUNITY INVOLVEMENTS

2018 - On-Going

Advisory Committee board member for the new Savannah Green Infrastructure to Green Jobs Initiative. City of Savannah, GA

2017 - Present Founder and Faculty Advisor for GeoDesign Student Chapter.

- **Cross-disciplinary** collaboration platform at SCAD with students from various disciplines with one common INTEREST; " *GIS for spatial analysis*" dedicated to learning, exploring and teaching, GIS through a collaborative platform.
- bringing awareness on the **intersections of science**, research, and design to increase the social and physical functionality of our world.
- **local community outreach** programs, educational workshops, and the GIS applications.
- Educating the community, the concept of **GeoDesign** to help solve issues that arise in our daily life as well as our environment.
- Assist and volunteers at local school to help underprivileged school districts.
- consult and work with cities on small projects.

2014 - 2018 Present Board of Director Member for SDRA

[Savannah Development and Renewal Authority]

- Created in 1992 by the Georgia General Assembly, Savannah Development and Renewal Authority (SDRA) is an independent public development authority.
- We work with the local government and private sector to plan, develop, and promote greater downtown Savannah. Quality cities and business environments don't just happen; they have to be created and nurtured.
- At SDRA, our goal is to be the leader in developing both the physical environment and a successful community culture.
- The geographic focus of SDRA is greater downtown Savannah, GA.
- SDRA members meet once a month to help jump-start economic development activity therein.

2016 - 18

Faculty Lead and Advisor for SCAD GeoDesign Student Chapter SCAD.

## JUL.12-13th 2017. ESRI

IMF [Image and Mapping Forum] and User Conference in San Diego, CA.

Explore the future of GIS and hear from accomplished federal government leaders about their ground-breaking projects and roadmaps to success.

## June 2016 : Architecture et Culture Numérique :

Université de Paris Diderot, Paris France.

## June 18-20 2012 :

## l'«Atelier international expérimental pour la Cité bio-numérique ».

International Workshop of the Greater Paris, Paris, France 2013-Cité des sciences et de l'industrie.

<https://youtu.be/gIMfenaHHvI>

## INSPIRATION FOR RESEARCH AND TEACHING

I am fascinated by the excitement and creativity of each individual student. I find inspiration in the uncovered mystery that exists in every interaction or lesson.

Each time I teach a student something, I am learning a lot more from the interaction, learning something new; something unique to the moment of interaction and linked to the involved individuals participating. As someone who is committed to better practicing, teaching, and learning, my research interest is in the area of new technologies as they infiltrate and revolutionize the fields of architecture/urban design and heritage.

My goals as researcher/educator are to create environments that foster critical thinking; allow students to learn how to think critically about environments issues as they relate to design problems.

## 2017 - 2018 Faculty Advisor

NoMa [National organization for Minority Architect]

- Oversees and help run NoMa student organization.

## 2017 – Present

## PROFESSIONAL EXPERIENCE

### CO-FOUNDER of geoGen LLC

Director of operations; I established this small business to support small medium and large sized organizations achieve their objectives toward more intelligent and Resilient Urban Design. Our services help professionals and Cities translate strategic plans into sustainable initiatives. Provide solutions to optimize city performance, with particular focus on spatial analysis, sensors and mobile technology.

- the production cost for accurately mapped critical infrastructure data such as 3D City Models, Planimetrics, and Interactive Facility Data, help leverage today's intelligent software. geoGen exists to provide Government Agencies, AEC companies, and Commercial businesses with an accurate base map for assessing Global threats such as: flooding and storm-surge, biodiversity, economic, social, and cultural transitions, and the ever-increasing urban population.
- Today, it is URGENT that organizations migrate to precision-accurate higher resolution data; because properties, politics, economy, marine, planning and designing Cities can no longer operate as in the past.
- services include: 1. Planimetric with a focus on drafting 2D features on the Earth's surface. 2. CAD2GIS to facilitate a transfer of blueprint or CAD data. 3. SCAN2BIM is a point-cloud Processing Service for Facilities. 4. 3D City/Urban Modeling service provides 2D/3D geometries for GIS, CAD etc.
- <https://www.alignable.com/savannah-ga/geogen/planimetrics-cad2gis-scan2bim-3d-city-urban-modeling>.

2017 – Pres. Service Director at Good-Lands. <https://good-lands.org/team/>

## 2020 – to present.

2020-Present – Founder and CEO at GeoEduGaming (GeEG).

## RESEARCH AND INTEREST

### Present

Spatial Definers of human performance; habitus and interaction.

Spatial Cognition and Mental Representation of Space

### Ongoing

Spatial and Temporal EVENTS visualized in Virtual projection as way of making the INVISIBLE VISIBLE, their importance and necessity in the DESIGN processes.

Architectural Representation/ Virtual Projection: Time and Space/Surface and Depth.

### Present & ongoing:

- Algorithms and intelligent urban DesignESRI platform
- Regression Analysis to understand and predict Urban issues.

This involves making careful observations, asking questions, thinking, making decision based on observed patterns and facts, and proposing.

This exercise helps guide toward scenarios in solving problems. It is in essence a way of thinking logically that is accessible to all human and is important as we confront issues such as the global warming, threats to natural resources etc....

It is important that my students have a basic understanding of how the Design process works and recognize their ability to use it to make connections about the world in which they live. I employ a wide variety of active-learning techniques; from hands-on activities that allow the students to make their own discoveries and connections to computer generated models with Geospatial tools. I create open learning environments in which students feel comfortable sharing their ideas and working collaboratively to make discoveries.

Many students that leave my class will likely forget most details, but if they have learned to research, analyze and ask questions, they will be able to critically approach Design problems in the future. Because I do place heavy emphasis on conceptual thinking, and machine empowered intelligence to help young designers make better decisions and become better problem solvers and change Agents of the future.

Year after year, my passion for teaching has grown through daily interactions with the students. This has help reorient my research toward:

*Automatic learning,  
Artificial Intelligence (AI),  
BIG DATA management,  
Remote sensing for environmental  
management,  
Geomatics for the construction of heritage  
protection.*

*Virtual Reality and Augmented Reality.*

I see myself as an eternal learner who is constantly inquiring, re-evaluating, and challenging ideas. Because the world continually unfolds unveiling new truths.

it is the innovative mind of the students, the collective intelligence that emerges from all minds combined, along with the risk-taking attitude and the speculative nature of student's interventions that make my job inspiring.

- Digital Fabrication + Hand Craft; an experimentation that investigates the relationship between efficiency, precision and tactile variation within design and fabrication.
- 3D extraction Using **LiDAR**.

**2017 - 2018** Geomatics focused on applied research, integrated innovative systems and algorithms applied to smart cities, Collaboration with *CSI Management Srl*. Rome, Italy.

Oriented to the definition, design, implementation and validation of algorithms and mathematics models in the areas of machine learning, artificial intelligence, big data management, and the management and use of data deriving by Geomatic techniques.

**2016 - Present** 3D modeling, energy management, documentation/management of Heritage, monitoring of territories and spaces structures.

**2013 - Present** Virtual Reality/ Augmented Reality and urban Resilience.

Using ESRI CE to push the envelope in the creation and innovation of future cities on a Gaming platform.

**2013 - Present** Spatial analysis: Urban Design, Big Data processing, Systemic approach to urban Design  
ESRI, MOOC courses

## GRANTS/FELLOWSHIPS

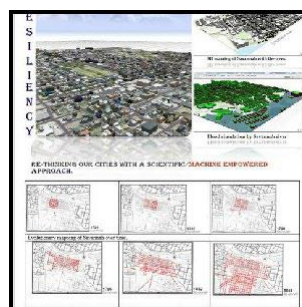
**Summer 2017:** Presidential Fellowship to Rome to work in Collaboration with CSI Management Rome on a research that explores Urban resilience through the Use of BIG DATA, Algorithm thinking and machine learning.

**Summer 2015:** SCAD (Savannah College of Art and Design) Presidential Fellowship Award to travel to Paris and Toulouse (France); Research topic: **Urban System/Urban Body**; *exploring a procedural approach as a promising way of addressing Urban planning.*

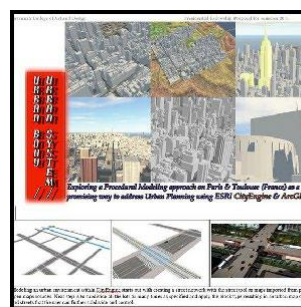
**Summer 2012:** SCAD (Savannah College of Art and Design) Presidential Fellowship Award to travel to Cameroon (Africa);

Research topic: **The Art and Architecture's World in the Grassland and Northern Cameroon(Africa);**

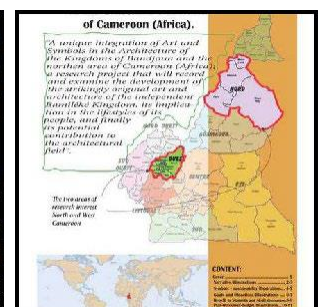
"A unique integration of Art and Symbols in the Architecture of the Kingdom of Bandjoun and Northern area of Cameroon (Africa); a Research Project that will record and examine the development of the strikingly Original Art and Architecture of the Independent Bamileke Kingdom, its implication in lifestyles of its people, and finally its Potential contribution to the Architecture Field".



Urban Resilience



Urban BODY Urban SYSTEM



Art of Architecture in the...

## AWARDS/HONORS AND RECOGNITION



# EXHIBITIONS

## EXHIBITIONS / SCREENINGS

**2003:** University of Minnesota students' new media work.

Installation **"There is a Field"** a collaboratively – created journey through the Middle East guide by Sonja Kuflinec. My work was screened in Rarig Center University theatre (West Bank).

February 26th through March 3rd, 2003.

### **2003:**

Architectural work exhibited at the ArtGallery of The Art Institutes International Minnesota. February 1st to March 4th, 2003.

Screen Show at the **Weisman Art Museum** (Minneapolis). Screen presentation to the public for the Digerati event. February 3rd.

**2001** M.Arch. Thesis Exhibition, University of Minnesota.

## TEACHING PHILOSOPHY

### **Personal Statement:**

My philosophy can be explained as a set of beliefs, concepts, and assumptions, some of which I hold through readings and personal experiences from my travels.

As a life-long learner who has always been fascinated with the digital world and its contrast with the natural and man-made world, I am dedicated to the learning, teaching, practice, and study. I find there is a gap between digital fabrication and hand Craft.

On one hand, a digitally driven design may be seamlessly precise and consistent but may also feel sterile and distant from the human body. On another hand, a materially driven design may be intimate and tactile, but may lack the accuracy needed to connect elements. I view my role as of the GAP filler, one of someone who recognizes the uniqueness of

**Fall 2017:** Student Studio Project Wins the international Design Award **IDA**

<https://youtu.be/Vc9svY8F31I>

**Winter 2011:** Student project selected for luxurious Villas in New Delhi India.

**Winter 2008:** Student project selected and implemented in the Bahama... Trip to the Bahamas with the winning team for site visit and meeting with local contractors.

### **Spring 2011:**

5 Student projects selected and Exhibited at SEMAPA Paris, France. *Project was about the train station for the new millennium. Reviewers included Architects and Designers from all over Paris.*

<https://www.behance.net/gallery/4382319/Apotheosis>

### **Winter 2008**

- Student project selected and implemented in the Bahama.
- Trip to the Bahamas with the winning team for site visit and meeting with local contractors.

**Fall 2001** International Student Work Opportunity Program (**ISWOP**).

(This was a cash award which covered half of my tuition) granted by the International Study Services at the University of Minnesota.

**2000-spring 2001** International Tuition Assistance Fund (**ITAF**) from the International Study Services at the University of Minnesota.

**1992&1997** a year scholarship at the Technische Universität Dresden (Germany).

**July 1997 M. Arch.** [Dresden Technische Universität](#)(Germany) with

Best thesis Award (**1.7**)

## PROFESSIONAL WORK HISTORY

### **2017:**

**Designing a 150 Beds Hospital in Yaoundé Cameroon:** this project uses the concept of GeoDesign in the process of the architectural Design through the Use of the ESRI platform coupled with The BIM application. This process combines GIS and BIM. The result is a GEOBIM approach that uses the spatial, geographical, socio-economic and environmental data to Design .

### **2007 -2016:**

- **Designer and Private owner .**
- Developed a proposal for apartment buildings for students and young professionals in Yaounde Cameroon (Africa).

### **1993 - 1994:**

Intern Architect 'DOMOS MASSIVHAUS GmbH' 1993. Dresden, Germany

### **1999 2001**

- Software Tech IBM

### **2001:**

- **Intern Architect Ellerbe Becket** Summer 2001 Intern architect at Ellerbe Becket architects (Minneapolis office).

### **1999-**

### **2001:**

- Teacher Specialist for the Study Abroad program at the University of Minnesota.

Nature and the importance of making a humane design by trying to combine Digital fabrication techniques with hand craft material manipulations in search of a unique hybrid tectonic that merges connection inaccuracies with subtle but sensual divergences between repeating patterns.

## BUSINESS RECOGNITION

December 2017 - geoGen.LLC

### SAVANNAH MORNING NEWS COLUMN

- In 2017, geoGen.LLC, my company was selected by the Savannah Morning News among a list of others in the Savannah area as a runner up! a summary of geoGen was in the December 2017 month in business section.

## SKILLS IN DIGITAL APPLICATIONS

**ArcGIS Online:** Cloud based Geospatial platform for spatial analysis and suitability studies.

### ArcGIS Urban: (ESRI):

- Used for urban planning, urban design, defense, simulation, and entertainment by using existing GIS data to create high- quality 3D content.

### City-Engine (ESRI)

- Procedural 3D model from ESRI , City Engine, allows for easy 3D content creation and design to ArcGIS. City Engine facilitates the use of ArcGIS in urban planning, urban design, defense, simulation, and entertainment by using existing GIS data to create high-quality 3D content.

## CERTIFICATIONS

### CERTIFICATIONS

McNeel & Associates; **RHINO**

ESRI, City Engine

ESRI, GIS Pro

ESRI , GIS Online

ESRI APP Builder

ESRI ArcGIS Pro

- Teacher Assistant/Research Assistant
- / Computer Lab Attendant University of Minnesota

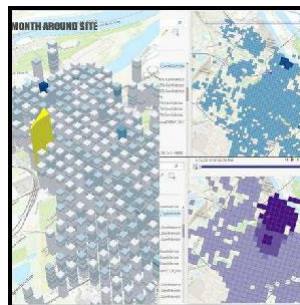
### Spring/Summer 2000-2001

- Computer-Lab attendant** for the architecture department. Duty: Maintenance of Macs G3 and Windows NT Networks. Help students use software and hardware. Maintenance of first year student's laptops (configuration, load of software. etc). Use of Macs and Windows platforms.

### 1999-2001

- Teacher assistant** for drawing classes 1301 and 330 Levels. Helping teach classes. Assigned tests, homework and conducted extra help sessions.

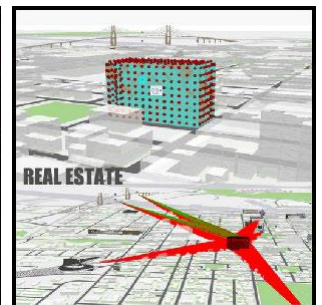
## ON GOING RESEARCH ON GEO-SPATIAL ; SPATIALIZING DATA WITH CITY MODELING.



Site Analysis CRIME



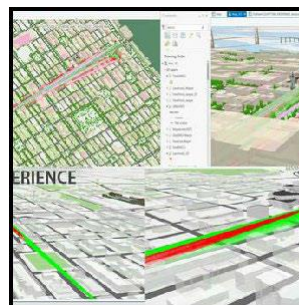
Site Analysis Sea Level Rise ...



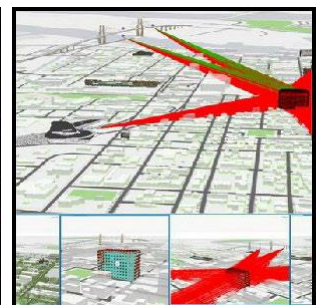
Real Estate



History Preservation



Urban experience



VIEWS

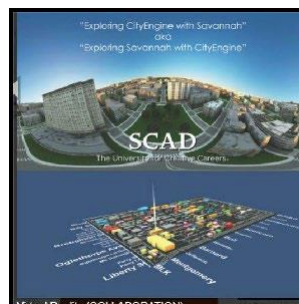
## GEO-SPATIAL ANALYSIS RESEARCHS AND CONFERENCE PRESENTATIONS/COLLABORATION

Feb 13th -14th 2017 ESRI Federal Conference, DC (COLLABORATION WORK show cased in the Drone Area)

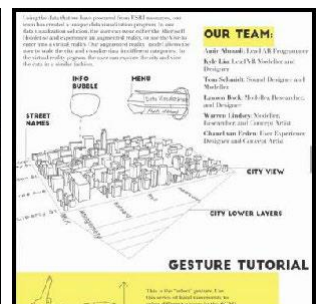
Virtual Reality Collaboration with Visual effect



GAMIFYING THE CITY...



VR, Using City Engine



Immersive Experience



## Arc GIS Pro (ESRI)

Essential desktop application for creating and working with 2D and 3D spatial data.

## Arc MAP (ESRI)

For geospatial processing, used in my work to primarily to view, edit, create, and analyze geospatial data.

## Microsoft Office

Excel Word Power Point.

## Google Sketch up

3D modeling application with Geo location capabilities and INETROPERABILITY with the ESRI Platform.

## Adobe Master Collection CS7.5

Adobe Photoshop Adobe Illustrator Adobe InDesign Adobe Premiere Pro Adobe Dreamweaver Adobe Fireworks Adobe Bridge Adobe Flash Adobe Acrobat.

## 3D Studio Max/VIZ (AutoDesk)

## Grasshopper

Used in my work in combination with Rhino for generative design modeling.

## Ecotect Analysis

Working Skill.

## Autodesk Green Building Studio(AutoDesk)

Working Skills.

## AutoCAD(AutoDesk)

Master.

## Autodesk Revit(AutoDesk) Architecture Autodesk Revit Structure.

Master

## Rhino

Working skills.

# ORIGINS AND BACKGROUND

Originally from Cameroon, Africa, Architect from Paris-La Defense, I am both French and American citizen, a world traveler with a great interest in understanding how people live and interact with their environment.

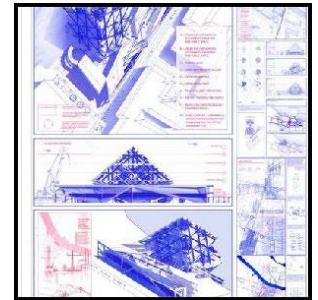
I Studied Architecture in Paris (France), Dresden (Germany). Traveled over Europe and Africa.



Re-Inventing the Savannah



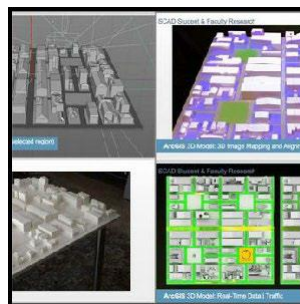
From Hollywood to HolySee



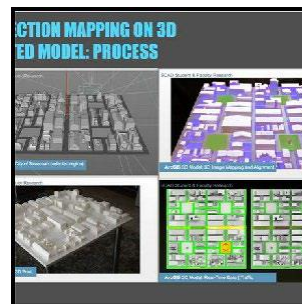
La d rive [ THE URBAN DRIFT]

# PROJECTION MAPPING TEST, WORK DONE IN COLLABORATION WITH THE MOTION MEDIA DEPARTMENT

This work was done as a twofold process. First Data was collected and analyzed, filtered and executed using GIS Pro, streamlined into City Engine for procedural Modeling, then exported into Rhino for 3D Print. Then the Motion Media team used the 3D Model digital and printed model to project Live data.



Projection mapping



Projection mapping

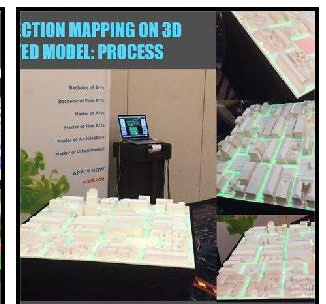
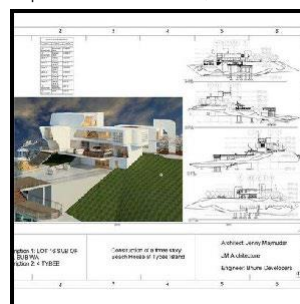


Exhibit at the ESRI User Conf...

# STUDENTS PORTFOLIO

## STUDENTS WORK

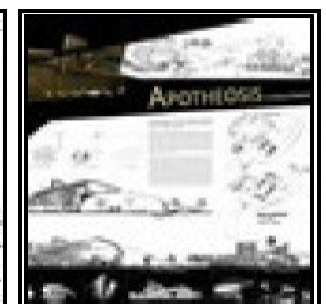
This section represents students work in various classes such as Revit and Form Space and Order,



House by the Water [REVIT]



Electronic Design I\_ WINTER ... Apotheosis: "A Multimodal



Relocated to Minneapolis MN in the US 1998, completed a second Master at the University of MN in 2001 with a focus on digital Design, storytelling, and visualization.

After graduating in 2001, I was offered a job as teacher Specialist at the University of Minnesota and helped lead the *Port City Program* (study abroad to Porto-Lisbon and Venice): Spring 2002

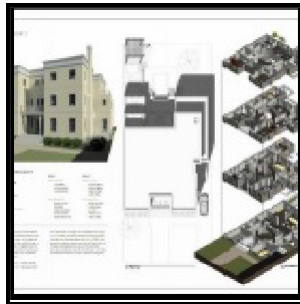
Later that year, I accepted a position as a CAD instructor at the *Art Institutes International Minneapolis*. Two years later in 2004, I took a job as professor of Architecture at SCAD in Savannah where I taught for 14 years until (2018).

#### **STUDY ABROAD PROGRAMS:** **SCAD - Lacoste (France)**

Winter 2005, Fall 2008 and Spring 2011, study abroad program to the South of France, architecture, Interior Design, and sequential ArtStudents.

#### **Port City Program University of Minnesota: Spring 2002.**

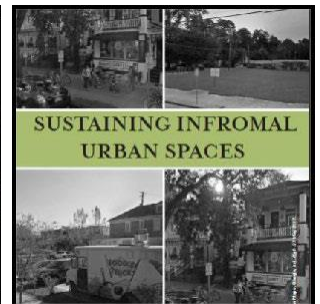
As **Teacher Specialist**, I Co-lead the program, taking graduate students in Architecture and Urban Design to Venice, and Portugal for one semester.



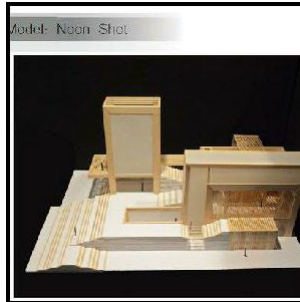
Luxurious Villa in India. [Real...



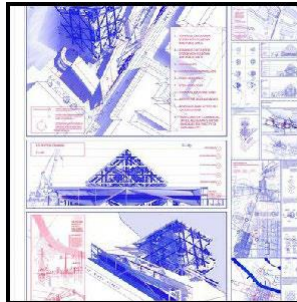
Luxurious Villa in India. [Real...



URBAN ECOLOGY



FUNDAMENTALS



Re-inventing the Union Station



Savannah Union Station

**LANGUAGES:** French -fluent, English [Fluent], German [read], Bulu-fluent [dialect of southern Cameroon], Bandjoun – Fluent [ dialect of West Cameroon].