



# Vanessa Oguamanam

Creative Technologist | Design Researcher | App Developer

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## EDUCATION


Georgia Institute of Technology - Ph.D. in Computer Science (Fall 2017- Present)

- Advised by Andrea Grimes Parker
- Specialization: Human-Computer Interaction, Mobile and Ubiquitous Computing
- GPA: 3.9/4.0

University of Maryland College Park - M.S. in Human-Computer Interaction (2015-2017)

- Advised by Tamara Clegg and Jon Froehlich
- Capstone Project -- HerVillage: Engaging Nigerian Girls in Co-designing an Application to overcome barriers to women's health education
- GPA: 3.91/4.0

University of Maryland College Park - B.S. in Computer Science (2012-2015)



## HONORS & AWARDS

- Facebook Emerging Scholars Fellowship -- 2019
- ACM Grant for CHIMe '18 Symposium at CHI -- 2018
- CRA GradCohort Workshop for Underrepresented Minorities & ppw Disabilities 2019

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- Georgia Tech's Sponsorship for Tapia Conference 2018
- ACM SIGCHI EC Development Fund Grant for Summer/Winter Schools-- 2017
- Georgia Tech's Sponsorship for Tapia Conference 2017
- President's Fellow, Georgia Institute of Technology 2017
- National Science Foundation Graduate Research Fellowship **Honorable Mention** '17
- National Science Foundation Bridge to the Doctorate Fellowship 2015-2017
- Maryland Delegate Scholarship 2015
- The National GEM Consortium **Associate Fellow** -- UMCP -- 2015
- Association of Women in Computing Sponsorship for Grace Hopper Conference 2015
- Google Sponsorship for Grace Hopper Conference Scholarship | 2014
- Association of Women in Computing Sponsorship for Grace Hopper Conference 2014
- Team awarded 1<sup>st</sup> place in the Google API Category at NSBE Hackathon 2014
- Clifford & Camille Kendall CMNS Scholarship Award 2014
- National Society of Black Engineers Academic Achievement Award 2012

## PUBLICATIONS

### PEER-REVIEWED CONFERENCE PAPERS

- 2020** Oguamanam, V., Cochran, Z., Lee, T., McKlin, T., Abowd, G., & DiSalvo, B. Cultural Clash: Exploring How Studio-Based Pedagogy Impacts Learning for Students in HCI Classrooms. ACM Conference on Designing Interactive Systems, **DIS 2020**. [Acceptance Rate: 25%]
- 2019** Solomon, A., Oguamanam, V., Guzdial, M., & DiSalvo, B. (2019, July). Making CS Learning Visible: Case Studies on How Visibility of Student Work Supports a Community of Learners in CS Classrooms. In *Proceedings of the 2019 ACM Conference on Innovation and Technology in Computer Science Education*, **ITiCSE 2019** (pp. 161-167). [Acceptance Rate: 25%]
- 2017** Clegg, T., Norooz, L., Kang, S., Byrne, V., Katzen, M., Velez, R., Plane, A., Oguamanam, V., Outing, T., Yip, J., & Bonsignore, E. (2017, May). Live physiological sensing and visualization ecosystems: an activity theory analysis. In *Proceedings of the 2017 Conference on Human Factors in Computing Systems*, **CHI 2017** (pp. 2029-2041). [Acceptance Rate: 25%]
- 2016** Kang, S., Norooz, L., Oguamanam, V., Plane, A. C., Clegg, T. L., & Froehlich, J. E. (2016, June). SharedPhys: Live physiological sensing, whole-body interaction, and large-screen visualizations to support shared inquiry experiences. In *Proceedings of the The 15th International Conference on Interaction Design and Children*, **IDC 2016** (pp. 275-287). [Acceptance Rate: 47%]
- 2016** Norooz, L., Clegg, T. L., Kang, S., Plane, A. C., Oguamanam, V., & Froehlich, J. E. (2016). "That's your heart!": Live Physiological Sensing & Visualization Tools for Life-Relevant & Collaborative STEM Learning. Singapore: International Conference of the Learning Sciences, **ICLS 2016**.

[Acceptance Rate: 37%]

## WORKSHOP PAPERS

**2020** Oguamanam, V., & Parker, A.G. (2020, April). Does Race and Culture Matter in the Design of Wearable Health-Tracking Devices. *Position paper that will be presented at the Race in HCI Workshop, CHI 2020.*

**2016** Oguamanam, V., & Gansallo, M. (2016, November). LEDz and Cocktailz. In *Proceedings of the First African Conference on Human Computer Interaction, AfriCHI 2016* (pp. 260-262).

## POSTER SESSIONS

**2017** Oguamanam, V., HerVillage: Engaging Nigerian Girls in Co-designing an Application to overcome barriers to women's health education. Poster presented at the University of Maryland College Park's College of Information Studies' (iSchool) Symposium (**2017**).



## WORK EXPERIENCE

### RESEARCH

- **2020 - Present** Wellness Technology Lab
  - Advisor: Dr. Andrea Parker
  - Project: Maternal Mental Health and Technology
  
- **2019** Google Inc, Android/Wear OS Team
  - UX Researcher
  - Lead: Jen Seth and Boian Boianov
  - Wear OS Team
    - Planned and administered two large longitudinal studies exploring the pains and joys of two competitors devices for end-users
  
- **2018-2019** Georgia Tech: Culture and Technology (CAT) Lab
  - Graduate Research Assistant
  - Advisors: Betsy DiSalvo
  - Maker Oriented Learning in CS Classrooms
    - Methods: Grounded Theory Inspired Methods (Open Coding, Axial Coding), Thematic Analysis
    - Analyzed findings from students' interviews and reported on the challenges that emerge when integrated maker studio-based instruction in HCI classrooms in CS departments on learning outcomes
    - Led the writing of a full paper presenting the findings from study that has been submitted and is in review to a top-tier HCI conference

- **2018** - Student Research Independent Studies
  - Near Peer Mentoring in the Global and Local South Project
    - Georgia Tech: Technology and Design for Empowerment (TanDem) Lab
    - Faculty: Neha Kumar and Ellen Zegura (external faculty)
    - Methods: Semi-Structured Interviews, Open Coding, Thematic Analysis
  - Sisters Rise Up
    - Georgia Tech High School Program
    - Faculty: Barbara Ericson
    - Methods: Focus Groups, Semi-structured Interviews, Thematic Analysis
- **2017** - Georgia Tech - Human-Centered Computing Intro Course -- Mini Research Project
  - Mini Project 1: MyPath Application
    - Advisor: Beth Mynatt, Mentor: Maia Jacobs
    - Methods: User Log Data Analysis
- **2016** Google Inc, Google Cloud Platform/Cloud Launcher
  - UX Research Intern
  - Lead: Tegan Garland
  - Google Cloud Launcher
    - Methods: user testing, focus group, hackathon
    - Planned, implemented, and analyzed the results of a hackathon focused on the current state of Cloud Launcher
- **2015-2017** University of Maryland College Park: Human-Computer Interaction Lab
  - Graduate Research Assistant
  - Advisors: Jon Froehlich, Tamara Clegg
  - BodyVIS Project
    - Methods: Focus Groups, Co-design, User studies, thematic analysis, prototyping
    - Collaborated on Bodyvis research project, focused on designing and implementing wearable e-textile prototypes with real-time physiological sensing and visualization used to engage and motivate children in learning about the human body
    - Assisted in running user studies and focus groups with formal and informal educators and children to gather data on how Bodyvis can be designed to support STEM learning
    - Coded, transcribed, and synthesized data collected from user sessions to aid in writing and submitting papers to top-tier HCI and Learning Sciences conferences
  - SharedPhys Project
    - Method: Field Studies, Mixed-Methods, Pre and Post Questionnaires, Thematic Analysis
    - Co-facilitated 3 back to back field studies
    - Effectively took notes during pilot studies and provided feedback on the visual designs learning activities, and study scripts for upcoming field studies

- Collected, coded, and analyzed 160 pre and post questionnaires based on a code scheme and transcribed interviews that were used to report on findings for the study
- **2015 University of Maryland College Park: Human-Computer Interaction Lab**
  - Graduate Student Researcher/Student (Oct-Dec 2015) -- Part of Final Project
    - Faculty Lead: Dr. Jennifer Golbeck Oct-Dec 2015
  - Trolling Comments Project
    - Methods: Web Scraping, Data Analytics, Thematic Coding
    - Explored the best ways possible to detect trolling comments in the comments section online
    - Web scraped comments from YouTube and Facebook and pulled comments using Twitter API and Perl Module
    - Collected 3000 comments using one of the methods mentioned above and coded them as being “trolling” or “non-trolling”
    - Effectively communicated and reported on findings and synthesized them into themes
- **2014 Distributed Research Experience for Undergraduates Program**
  - Summer Research Intern -- Northwestern University: Inclusive Technology Lab
    - Advisor - Dr. Anne Marie Piper, Mentor - Dr. Robin Brewer
  - Methods: Interviews, Transcribing, Open Coding, Field Deployment, Prototyping
  - Performed qualitative data collection and analysis to understand older adult social communication needs and practices
  - Developed an ambient art display for late life social communication using Arduino LilyPad, sensors, Arduino Yun, and XBee Module

#### SOFTWARE DEVELOPMENT

- **2013** The Boeing Company: Commercial Aviation Services, Boeing Online Documents (BOLD)
  - Developed new interfaces for our clients’ digital operations, repair, & parts manual using C/C++
- **2012** The Boeing Company: Defense, Space, & Security/Iridium
  - Redesigned the system’s interface as well as added new functionality to the team’s internal system using Java’s GUI and libraries



## TEACHING EXPERIENCE

### INSTRUCTOR

- Georgia State University: Digital Leaders to Learners (Summer 2018)

- Led a class of 10 middle school and high school students in fundamental concepts in computer science education
- Girls Who Code, Inc. -- Washington, D.C. (Summer 2017)
  - Trained 22 high school girls in Scratch, Python, Arduino C, Django, and web programming and empowered them to develop personally relevant applications that addressed issues in their community

## TEACHING ASSISTANT

- Lead Teaching Assistant -- Georgia Institute of Technology Spring 2019
  - Undergraduate Course, Big Data and Society, 48 students
- Lead Teaching Assistant -- Georgia Institute of Technology Fall 2018
  - Undergrad/Grad Course, Qualitative Research Methods, 40 students
- Co-Lead Teaching Assistant -- Georgia Institute of Technology Spring 2018
  - Undergraduate Course, Introduction to Cognitive Science, 125 students
- Co-Lead Teaching Assistant -- Georgia Institute of Technology Fall 2017
  - HCI Master's Course, Professional Preparation and Practice -- 100+ students



## TECHNICAL SKILLS

**PROGRAMMING** --- Python, Java, HTML, CSS, Javascript, Android

**METHODS** --- Interviews, Surveys, Participatory Design, User Testing, Field Deployments



## SERVICE

### ACADEMIC SERVICE

- **Reviewer**
  - FABLearn 2019 -- Short Paper
  - ICLS 2018 -- Paper Poster
- **Panelist**
  - Georgia Tech's FOCUS Grad Recruitment Program 2018
- **Student Volunteer**
  - Black Compute HER Conference 2018
  - AfriCHI Conference 2016

### OUTREACH, ORGANIZATIONS, & MEMBERSHIPS

- **2020 - Member** - African Graduate Students Connect
- **2020 - Member** - Black Graduate Students Association at Georgia Tech

- **2019 - Programs Committee** -- National Society of Black Engineers (GTSBE Chap)
- **2018 - Member** -- Diversifying Future Leadership in the Professoriate (FLIP) Alliance
- **2018-2019 - Communications Chair, WebMaster** -- African Graduate Students Connect @ Georgia Tech
- **2017 Volunteer**-Working to Advance STEM Education for African Women Foundation
- **2017 - Co-Founder/Technical Project Manager** - She Hacks Africa
- **2015 - Volunteer** - Louis Stokes Alliances for Minority Participation (LSAMP) STEM Expo Event (University of Maryland College Park Chapter)
- **2014 - Tech Assistant** - Black Girls Code
- **2012-2014 - Session Lead Instructor** -- Annual Cyber Security Workshop for Middle School Girls at the University of Maryland College Park
- **2012 - Volunteer/Mentor** -- Microsoft Digigurlz Camp

