Curriculum Vitae
Andrew Boggio-Dandry
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EDUCATION

University at Albany, State University of New York
MS, Electrical & Computer Engineering — Expected June, 2020
Concentration: Computer Engineering

University at Albany, State University of New York
BS, Computer Engineering — 5/2018
Minors: Computer Science and Mathematics — GPA: 3.91

SUNY Westchester Community College
AS, Liberal Arts & Sciences: Mathematics and Science — 12/2014
Graduation with Highest Distinction, Phi Theta Kappa Member — GPA: 3.75

AWARDS & FELLOWSHIPS

President's Award for Undergraduate Research, 2018
The University at Albany President's Award for Undergraduate Research is UAlbany's most prestigious research award for undergraduate students. Students cannot apply for this award directly; a faculty member within their school or college must nominate eligible students.

IEEE Charles LeGeyt Fortescue Graduate Fellowship, 2019-2020
The Charles LeGeyt Fortescue Scholarship was established in 1939 as a memorial to Charles LeGeyt, in recognition of his valuable contributions to the field of electrical engineering. This highly competitive fellowship is awarded to one U.S. graduate student each academic year.

PROJECTS

Bee Notified, 2018
As part of the Computer Engineering undergraduate program a 2-course capstone sequence was required, with the aim of working with an industry stakeholder to design and implement a real-world project. The project was part of the New York State Industry for the Disabled (NYSID)'s Cultivating Resources for Employment with Assistive TEchnology (CREATE) program. A mobile smartwatch/smartphone application, *Bee Notified*, was designed and built according to stakeholder requirements, which won 3rd place in CREATE's annual symposium and a prize of $5,000.00.

RELEVANT EXPERIENCE

Research Project Assistant
State University of New York Research Foundation

- (*Fall, 2019*) Working on the *CHRONOS* project under the supervision of PI Dr. Dola Saha designing the architecture of the Cloud-RAN (NSF funded proposal, award 1823225) and testing RfSOC equipment.
- (*Summer, 2019*) Working on an *emergency notification application* under the supervision of University at Albany Professors Zheleva and Bogdanov from the Department of Computer Science. Focusing on back-end development (using

Apache Tomcat, the Hibernate framework, the Spring framework and MySQL) and deployment of the mobile application to test users. Numerous questions and hypotheses will be explored post-deployment.

Graduate Teaching Assistant
Department of Electrical and Computer Engineering
University at Albany, State University of New York

Attended lectures, tracked attendance, proctored and graded exams, entered and maintained grades, held office hours, and provided review preparation for every exam. Supervised students to develop analytical and practical computer science skills through labs and projects. Held weekly lab sessions to assist students in developing a sense of "algorithmic thinking."

- (*Spring, 2020* IECE-141 (C Programming for Engineers)
- (*Spring, 2020* IECE-233 (Programming at the Hardware/Software Interface)
- (*Spring, 2019*) ICEN-200 (C Programming for Engineers)
- (*Spring, 2019*) ICEN-450 (Design Lab II)

Peer Advisor
College of Engineering and Applied Sciences, University at Albany, State University of New York

- (*Fall 2018*) Advising undergraduate, first semester engineering freshmen through weekly "study cluster" meetings. Topics include general program questions, how to successfully navigate the undergraduate program to degree completion, and course-specific guidance and tutoring.

Graduate Research Assistant
University at Albany, State University of New York

- (*Fall 2018*) Continuing research on drone UAV swarm perpetual flight, and expanding to the larger idea of semi-autonomous swarm flight to assist in disaster area recovery/search and rescue.
- (*Summer 2018*) Analyzing the viability of UAV swarm perpetual flight. Investigating methods of continuous energy replenishment based on queuing theory and conservation of energy. Paper on continuous energy replenishment for drone swarms accepted to IEEE's UEMCON.
- (*Summer 2018*) Conducting interdisciplinary research on the ethics of artificial intelligence.

Undergraduate Teaching Assistant
Department of Electrical and Computer Engineering
University at Albany, State University of New York

Supervised students to help them develop analytical and practical computer science skills through labs and projects. Collaborated with faculty to create and improve course materials and facilitate instructor/student communication. Held lab sessions and prepared lab devices and software applications, contributed to the development of exam materials, notes, assignments, labs, and projects.

- (*Spring, 2018*) ICSI/ICEN 333–Programming at the Software/Hardware Interface
- (*Fall, 2017*) ICSI 105–Computing and Information

- (*Summer, 2017*) ICSI/ICEN 213–Data Structures
- (*Summer, 2017*) ICSI/ICEN 210–Discrete Structures
- (*Spring, 2017*) ICSI/ICEN 213–Data Structures

Undergraduate Research Assistant
University at Albany, State University of New York
- (*Spring, 2017*) Investigated soft (non-dedicated) sensor data velocity, veracity, and volume, and its use in machine intelligence and data analytics in the context of smart cities.

Internship
Internship in Higher Education University at Albany, State University of New York

- (*Summer 2017*) Developed & prepared homework/lab assignments and classroom presentations, strengthened students' understanding of course topics by holding regular office hours, and created & administered assessments designed to accurately gauge students' progress and knowledge.

PROFESSIONAL MEMBERSHIPS AND CERTIFICATIONS

FAA Part 107 Remote Pilot, certified 2018
Institute of Electrical and Electronics Engineers (IEEE), Student Member Since 2017
Association for Computing Machinery (ACM), Student Member Since 2017
CompTIA A+, certified since 2010

PEER REVIEWER

TPC member, IEEE Global Information Infrastructure and Networking Symposium (GIIS 2018)
TCP member, IEEE Global Information Infrastructure and Networking Symposium (GIIS 2019)

PUBLICATIONS

Journal Publications
- H. Habibzadeh, A. Boggio-Dandry, Z. Qin, T. Soyata, B. Kantarci, H.T. Mouftah, (2018) "Soft Sensing in Smart Cities: Handling 3Vs Using Recommender Systems, Machine Intelligence, and Data Analytics," in IEEE Communications Magazine. doi: 10.1109/MCOM.2018.1700304
- H. Habibzadeh, K. Dinesh, O. R. Shishvan, **A. Boggio-Dandry**, G. Sharma and T. Soyata, (2019) "A Survey of Healthcare Internet-of-Things (HIoT): A Clinical Perspective," in IEEE Internet of Things Journal. doi: 10.1109/JIOT.2019.2946359

Conference Publications / Presentations
- **A. Boggio-Dandry**, and T. Soyata, (2018) "Perpetual Flight for UAV Drone Swarms Using Continuous Energy Replenishment," at the 2018 9th IEEE Annual Ubiquitous Computing, Electronics & Mobile Communication Conference (UEMCON), New York City, NY, USA, 2018. doi: 10.1109/UEMCON.2018.8796684
- K. Doke, N. Chengwang, **A. Boggio-Dandry**, P. Bogdanov, and M. Zheleva, (2019) "EApp: Improving Rural Emergency Preparedness and Response," at the 2019 on Wireless of the Students, by the Students, and for the Students Workshop (S3'19). ACM, New York, NY, USA, 12-12. doi: 10.1145/3349621.3355731

Book Chapters
- "Other GPU Programming Languages" In T Soyata, "GPU Parallel Program Development Using CUDA," Chapman & Hall, 413–423.