Current: Gainesville, Florida
Home: Chicago, Illinois

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Princess Priscilla Lyons

Education

Doctor of Philosophy | May 2022 | University of Florida, Gainesville

- Major: Electrical & Computer Engineering, 3.52/4.00
- Research Interests: Machine Learning, Natural Language Processing, Data Analytics

Master of Science | Dec 2019 | University of Florida, Gainesville

- Major: Electrical & Computer Engineering, 3.52/4.00
- Research: Machine Learning, Image Processing, Anomaly Detection

Dual Bachelor of Science | May 2017 | University of Missouri, Columbia

- Major: Electrical Engineering, Computer Engineering, 3.16/4.00
- Minor: Spanish, Computer Science, Mathematics

Work Experience

Data Science Intern **| Lam Research Corporation | Summer 2020**

- Worked on an Industry 4.0 initiative within the Service Analytics Research and Development group to improve automatic equipment testing and analysis between field engineers and data analysts
- Developed efficient parsers to extract recommended datalog parameters used for building statistical models from numerous technical documents and export them for easier utilization for model building
- Created programs to automatically generate and filter subsystem parameter for fleet monitoring application which is being developed for Lam Flex and Kiyo Etch Chambers

Graduate Research Assistant **| University of Florida | Fall 2017 – Present**

- Conducted natural language processing research on multi-lingual datasets to analyze the effects of translation on cross-lingual authorship attribution
- Cooperated with a team of researchers from remote universities to develop an underwater environmentally adaptive target characterization and detection system
- Compared and developed unsupervised and supervised anomaly and target detection methods in synthetic aperture sonar (SAS) imagery
- Authored and presented a SPIE Defense + Commercial Sensing research paper titled, “Comparison of Prescreening Algorithms for Target Detection in Synthetic Aperture Sonar Imagery.” [1]

Software Engineering Intern **| Lockheed Martin – Space Systems Company | Summer 2016/2017**

- Collaborated with a team of software engineers on an independent research and development project
- Created C++ software tools to parse SDAS files of a switch matrix to locate errors in the hardware configuration, return all USB device names, GUIDs and paths to the user
- Designed a C++ driver to interface with a Serial I/O SIO4 board using a RS422 communication standard on a RedHawk Linux real-time operating system
- Utilized the Hardware-in-the-Loop (HWIL) technique to troubleshoot and perform successful transmissions and receptions of data with a serial I/O SIO4 board for an integrated flight simulation

Skills & Relevant Courses

- Skilled in C, C++, Java, Python, R, CUDA, OpenMP and Matlab programming languages
- Software Design, Embedded Systems and Computer Architecture, Hardware Security
- Machine Learning, Image Processing, Data Analytics and Natural Language Processing
- Fundamentals of Biometric Identification
- Advanced conversational Spanish

Honors, Leadership & Activities

- GEM Full Science Fellow 2020
- Univ. of Florida Graduate Research Assistantship Award
- Univ. of Florida ECE Ambassador (2020 – Present)
- Univ. of Missouri, Celebration of Women in Engineering Honoree 2016
- Univ. of Missouri Dean’s Lists (Fall 2014, 2016)
- Univ. of Missouri Engineering Ambassador (2014-2015)
- Mizzou IEEE Secretary (2015-2016)
- Mizzou IEEE Engineers Treasurer (2016-2017)
- Griffiths Leadership Society of Women (2014-Present)
- National Society of Black Engineers (2012 – Present)

[1] **P. Lyons**, D. Suen, A. Galusha, A. Zare, and J. Keller, “Comparison of Prescreening Algorithms for Target Detection in Synthetic Aperture Sonar Imagery” in Proc. SPIE 10628, Detection and Sensing of Mines, Explosive Objects, and Obscured Targets XXIII, 2018.
https://faculty.eng.ufl.edu/machine-learning/2018/03/lyons2018ace/

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