JENNIFER
FUHRER

Passionate **senior software engineer with a Top Secret clearance** seeks a full-time position with a diverse and dynamic enterprise. Positive team player offers practical experience and a personal commitment to excellence through collaboration and cooperation.

EXPERIENCE

Software Engineer II | Grier Forensics
JUNE 2020 – PRESENT | OWINGS MILLS, MD
- Led efforts to research and write project proposals for Air Force and DARPA SBIR topics.
- Designed and developed custom communication protocols at the IP layer in C++ to efficiently share and verify the credentials of airborne systems participating in a secure network.
- Created a Command Line Interface and the framework to support its communication with an Airborne Cyber Defense application in Python that allows a system administrator to easily configure and control units on a secure network.
- Documented and compiled team's monthly progress into customer facing technical reports.
- Developed, executed, and documented unit tests throughout the development cycle of projects.

Intelligent Physical Systems (ECE 3400) Teaching Assistant | Cornell University
AUGUST 2018 – DECEMBER 2018 | ITHACA, NY
- Administered lab sections and held open office hours for students creating a maze mapping robot. Assisted students building analog circuits and developing on embedded devices.

Manufacturing Engineering Intern | Wilcoxon Sensing Technologies
JUNE 2018 – AUGUST 2018 | GERMANTOWN, MD
- Programmed a UR3 Robotic Arm to implement an automated sensor part lapping process.

EDUCATION

Electrical and Computer Engineering B.S. | Cornell University
AUGUST 2015 – MAY 2019 | ECE WOMAN OF THE MONTH (NOVEMBER 2018)
Organizations: Autonomous Underwater Vehicle Project Team (CUAUV), Guild of Visual Arts (GVA)
Notable Courses: Design Using Microcontrollers, Computer Architecture, Analog Integrated Circuit Design, Embedded Systems, Intelligent Physical Systems

SKILLS
- Languages (proficient): Python, C, C++
- Languages (familiar): Bash/Shell, Verilog, MATLAB, SQL, Scala
- Software/Platforms: Linux, Git, Microsoft Suite, Atlassian Suite, VS Code, Hadoop, Apache Spark
- Electrical Analysis Equipment (DMM, Oscilloscope, etc.)
- Embedded Development: PIC32, FRDM-K64F, Arduino, DE0-Nano (Cyclone IV)

PROJECTS

Groovy Times
Published in Circuit Cellar (April 2020, Issue 357)
- Wireless hand-gesture rhythm game using PIC32s, Arduinos, RF radios, and an accelerometer

LED Minesweeper
- A minesweeper game implemented using an embedded FRDM board, LED matrix, and custom circuit controller