SAMUEL PETER FEIG

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SKILLS

- Programming & Platforms: Java, C++, Python, Bash, OpenCV, JUnit
- Cyber Security: Collegiate Cyber Defense Competition (CCDC) Team Member (3rd Place, 2019), Cyber Security Awareness Week (CSAW) CTF, SquareCTF, PicoCTF
- Network Systems & Tools: SSH, FTP/SFTP, TCP/UDP Sockets, Nmap, Wireshark, Active Directory
- Software: Git, Maven, SharePoint, Jira, VMWare, PostgreSQL, GDB
- SAFe 4 Agile Certified
- Foreign Language: Japanese (JLPT level N5)

WORK EXPERIENCE

SOFTWARE ENGINEERING INTERN – MITRE, COLORADO SPRINGS, CO SUMMER 2019

Spark Award for exceeding expectations in software development as a first-year intern

- Contributed to the development of an extensible multi-domain framework in java for the modeling and simulation of space situational awareness (SSA) with the goal of preserving accuracy while elevating legacy code capabilities into a modern architecture to enable DoD clients to make educated decisions faster.
    - Spearheaded a group within a 10-person agile software development team in extracting the sensor model math for radar sensors from legacy C++ code. Using the knowledge gained, guided the efforts for the optical sensor calculations and performed end-to-end testing to assure results mirrored those of legacy software.
    - Assisted with the configuration, addition of distinct user roles, and population of a PostgreSQL database to allow for improved and efficient storage of simulation data with role restricted access.

IT ASSISTANT – INTEGRATED TEACHING AND LEARNING LAB, UNIVERSITY OF COLORADO, BOULDER 2019 – PRESENT

- Support the daily operations of the IT infrastructure. Build, install, and debug software packages for variable environments, and providing software/hardware support for students, faculty, and staff.
    - Spearheaded a group to test and implement a new inventory management system to enable more efficient management of lab owned hardware.

PROJECTS

- Implemented motion profiling control in Java to generate trapezoidal motor outputs for efficient point-to-point travel of the robot during autonomous operation; program won the 2018 Creativity Award and 2018 Michigan Engineering Excellence Award *(FIRST Robotics – Frog Force 503)*
- Developed and wrote the 2017 and 2018 team business plans in a 4-member committee *(FIRST Robotics – Frog Force 503)*
- Traveled to Shijiazhuang, China to mentor a pre-rookie FIRST Robotics Competition team in java programming and the design and fabrication of their robot. Rookie team went on to win first place at the 2017 FIRST Shanghai International Robotics Invitational *(FIRST Robotics – Frog Force 503)*
- Developed vision targeting system utilizing a Raspberry Pi, OpenCV, and Java to detect and track targets on the field; system won the 2017 Innovation in Control Award *(FIRST Robotics – Frog Force 503)*

EDUCATION

BACHELOR OF SCIENCE, COMPUTER SCIENCE

College of Engineering, University of Colorado, Boulder, CO *Anticipated Graduation* – MAY 2022

GPA: 3.781, Engineering Honors Student

- Minor: Global Business, Leeds School of Business
- Relevant Course Work: Computer Systems, Algorithms (in progress), Linear Algebra (in progress)
- Awards: Raytheon FIRST Robotics Scholarship, Ford Blue Oval STEM Scholarship, Chancellor's Achievement Scholarship, Harry R. Whitehead Engineering Scholarship

ACTIVITIES & AFFILIATIONS

CYBER SECURITY CLUB 2018 – PRESENT

- Campus Outreach Coordinator (2018 – Present)

FIRST ROBOTICS COMPETITION – FROG FORCE 503 2016 – 2018

- Group Lead-Programming (2017 – 2018), Mentor-Chinese Robotics team (Summer 2017)