Jackie Cho

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WORK EXPERIENCE

NASA Johnson Space Center (ER6)   May 2019 — Aug. 2019 | Houston, TX
Software Engineer Intern (Co-op)

● Developed C/C++ software for an FPGA in the Portable Life Support System that operates the thermal loop control for the new space suit (xEMU).
● Integrated program into NASA's simulation test framework (Trick) to allow testing/training of the Caution and Warning System (CWS) without hardware.
● Developed a tone generator for the xEMU Radio that alerts astronauts of any faults detected by the CWS during Extravehicular Activities.
● Developed unit tests with 100% coverage for Class A Safety Critical software.
● Updated software for CWS consumables calculations and fault detection logic.

NASA Johnson Space Center (ER6)   Jan. 2019 — May 2019 | Houston, TX
Software Engineer/Data Science Intern

● Developed Recurrent Neural Network with LSTM units in MATLAB to classify person's physical and cognitive state with 96% accuracy.
● Extracted physiological data from biometric sensors with MongoDB and automated data preprocessing techniques, decreasing data cleaning time by 20%.
● Performed data wrangling steps for feature extractions and conducted a sensitivity analysis, improving the network's accuracy rate by 17%.
● Developed Visual Evoked Potential Based Brain-Computer Interface in Keras with deep neural network and Electroencephalogram data for rover control studies.

NASA Johnson Space Center (JA)   Aug. 2018 — Dec. 2018 | Houston, TX
Software Engineer/Data Science Intern

● Developed large data visualization of NASA Wikis, improving navigation of 60,000+ pages/links and creating a foundation for future NASA projects.
● Utilized web scraping techniques to extract Wiki data with custom API, SQL, and Docker, creating an interactive visualization with a GUI in D3.js.
● Deployed a full-stack Wiki application that directly preprocess data from MySQL server using Python, decreasing data management time by 30%.

NOVO Consulting LLC.   Jun. 2018 — Aug. 2018 | New York, NY
Software Engineer Intern

● Developed a full-stack, multi-page web application that automates games and surveys previously done manually, decreasing time consumed by 40%.
● Implemented ReactJS to improve workflow in front-end, built back-end queries to PostgreSQL with Node.JS, and deployed on Amazon Web Services.
● Self-managed the project and learned the necessary tools/framework on the job.

New York University   Jan. 2018 — Jun. 2018 | New York, NY
Student Software Engineer

● Designed full-stack web applications for campus-wide use in the Office of Residential Life & Housing Services.
● Improved UI/UX with HTML5, CSS3, JavaScript (ES6), and Bootstrap, while implementing an accessible, mobile-friendly design.
● Compiled and deployed with ASP.NET and AWS, while managing workflow with Git.

Severance Hospital, Yonsei University   Summer 2017 | Seoul, South Korea
IT Specialist Intern

● Assisted with computer configuration, troubleshooting software and network connectivity issues.
● Updated office computers to latest Windows operating systems using SCSM and maintained hardware and software components on computer stations.

EDUCATION

New York University
2016-2021

B.A, Computer Science, Mathematics
3.72 GPA, Dean's Honors List

Relevant Courses: Data Structure, Intro to Computer Science, Intro to Programming, Linear Algebra, Discrete Math, Calculus I,II & III

SKILLS

Languages:
Experienced: Python, HTML5/CSS3, JavaScript, MATLAB
Intermediate: C++, C, Java, C#, SQL, Processing, PHP

Library/Frameworks:
Keras, TensorFlow, Pandas, Scikit-Learn, NumPy, ReactJS, jQuery, Bootstrap, Django, Unity, Node.js, D3.js, ASP.NET MVC, Trick

Databases: AWS, PostgreSQL, SQLite, MySQL, MariaDB

Tools/OS: Docker, Git, Jupyter, Octave, H2O Flow, Logger Pro, Arduino, MediaWiki, Visual Studio, UNIX, MacOS, Windows, Microsoft

PERSONAL PROJECTS

Zombie Island Escape
Ongoing

3D first-person shooter game where player must escape a zombie infested island under given time, built in C# and Unity.