# Jackie Cho

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#### **WORK EXPERIENCE**

#### Software Engineer Intern

May 2019 - Present | Houston, TX

NASA Johnson Space Center - Spacecraft Software Engineering Branch (ER6)

- Develop embedded C/C++ software for the auxiliary thermal loop controller in the Portable Life Support System for project Exploration Extravehicular Mobility Unit (xEMU).
- Integrate software into the NASA's simulation test framework (Trick) to provide testing and training of the Caution and Warning System functionalities.

**Data Science/Software Engineer Intern** Jan. 2019 - May 2019 | Houston, TX NASA Johnson Space Center - Spacecraft Software Engineering Branch (ER6)

- Develop recurrent neural network with LSTM units in MATLAB and Keras to classify person's physical and cognitive state with 96% accuracy.
- Extract raw physiological data with MongoDB and automate data preprocessing techniques, decreasing data cleaning time by 20%.
- Perform data wrangling steps for feature extractions and conduct a sensitivity analysis to make recommendations on their overall applicability, improving the network's accuracy rate by 17%.
- Support development of middleware solutions that integrate the biometric sensors and AI/Deep Learning algorithms to rest of the application.

# Software Engineer Intern

Aug. 2018 - Dec. 2018 | Houston, TX

NASA Johnson Space Center - Center Operations Directorate (JA)

- Developed a 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, Docker and Python, creating an interactive visualization with a GUI in D3.js.
- Deployed a full-stack Wiki application that directly preprocesses data from MySQL server using Python, decreasing data management time by 30%.
- Tested an Automatic Machine Learning UI, H2O.ai's Flow, by converting Jupyter Notebook to Flow and identifying its benefits and potential users.

#### Software Engineer Intern

Jun. 2018 - Aug. 2018 | New York, NY

NOVO Consulting LLC.

- Developed a full-stack, multi-page web application that automates games and surveys previously done manually, decreasing performance time 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.
- $\bullet$  Self-managed the project and learned the necessary tools/framework on the job while efficiently communicating with a non-technical supervisor.

#### Software Engineer Intern

Jan. 2018 - Jun. 2018 | New York, NY

NYU Office of Residential Life & Housing Services

- ullet Designed full-stack web applications for campus-wide use that manage housing applications, support center, and a forum.
- 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 working with a team of developers and managing workflow with Git.

# IT Specialist Intern

Summer 2017 | Seoul, South Korea

Severance Hospital of Yonsei University

• Assisted with computer configuration, troubleshooting software and network connectivity issues. Updated office computers to latest Windows operating systems using SCSM.

#### **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

## Today's

Nov. 2017

Web application that displays user's local time, location, weather, and a responsive todo list, using Weather API, JavaScript, and HTML5/CSS3.

# **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.