

# Jackie Cho

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## WORK EXPERIENCE

### NASA Kennedy Space Center (NE-XA)

Jan. 2020 – Ongoing | Florida

#### Software Engineer Pathways Intern (Co-op)

- Develop a full-stack, dynamic web app that automates data management and allows collaborative editing, built with CSS/HTML, JavaScript, PHP, and SQL.
- Resolve nonconformances and perform code reviews of the Customer Avionics Interface Development & Analysis (CAIDA) Advanced Telemetry Tool (CATT) while documenting and offering software design improvements.
- Collaborate with customers/professionals to determine functional/non-functional requirements for new software.

### NASA Johnson Space Center (ER6)

May 2019 – Aug. 2019 | Houston, TX

#### Software Engineer Pathways Intern (Co-op)

- Developed C/C++ software for a thermal control loop in the Portable Life Support System for the xEMU spacesuit.
- Integrated program into NASA's simulation framework (Trick) to test the Caution and Warning System (CWS).
- Developed a tone generator for the xEMU Radio that alerts astronauts of faults detected by the CWS during Extravehicular Activities and performed code reviews for consumables calculations and fault detection algorithms.
- Developed unit tests with 100% coverage for Class A Safety-Critical software.

### NASA Johnson Space Center (ER6)

Jan. 2019 – May 2019 | Houston, TX

#### Software Engineer/Data Science Intern

- Developed a Recurrent Neural Network with LSTM units in MATLAB to classify person's physical/cognitive state with 96% accuracy, using heart rate, pupil diameter, and EEG data.
- Extracted data directly from biometric sensors with MongoDB and TCP/IP, decreasing data cleaning time by 20%.
- Performed feature extractions and sensitivity analysis, improving the network's accuracy rate by 17%.
- Developed a Visual Evoked Potential Based Brain-Computer Interface using Keras for rover control studies.

### NASA Johnson Space Center (JA)

Aug. 2018 – Dec. 2018 | Houston, TX

#### Software Engineer/Data Science Intern

- Developed an interactive data visualization of NASA Wikis in D3.js, improving navigation of 60,000+ pages/links.
- Utilized web scraping techniques to extract Wiki data with MediaWiki API, JavaScript, PHP, and Docker.
- Deployed a Wiki extension that directly ETL data from MySQL using Python, decreasing preprocessing time by 30%.
- Tested an Automatic Machine Learning UI, H2O.ai's Flow and identified its application for future NASA projects.

### NOVO Consulting LLC.

Jun. 2018 – Aug. 2018 | New York, NY

#### Software Engineer Intern

- Developed a full-stack web application that automates games & surveys, decreasing time consumption by 40%.
- Implemented ReactJS in front-end, built back-end queries to PostgreSQL with Node.JS, and deployed on AWS.
- Learned the necessary tools on the job while efficiently communicating with a non-technical supervisor.

### NYU Office of Residential Life & Housing Services

Jan. 2018 – Jun. 2018 | New York, NY

#### Student Software Engineer

- Designed full-stack web applications for campus-wide use that manage housing applications and a support center.
- Improved UI/UX with HTML5, CSS3, JavaScript (ES6), and Bootstrap, while implementing a mobile-friendly design.
- Compiled and deployed with ASP.NET and AWS, while managing workflow with Git.

### Severance Hospital of Yonsei University

Summer 2017 | Seoul, South Korea

#### IT Specialist Intern

- Assisted with computer configuration, troubleshooting software and network connectivity issues.
- Updated computers to latest Windows operating systems using SCCM and maintained hardware & software components.

## EDUCATION

### New York University 2016-2021

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

**Relevant Courses:** Basic Algorithms, Computer Systems Organization, Intro to Mathematical Modeling, Data Structure, Intro to Computer Science, Linear Algebra, Discrete Math, Calculus III

## SKILLS

### Languages:

**Experienced:** Python, HTML5/CSS3, JavaScript, MATLAB

**Intermediate:** C++, C, Java, C#, SQL, Processing, PHP

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

**Databases:** AWS, MongoDB, PostgreSQL, MySQL, MariaDB

**Tools/OS:** Docker, Git, Trick, Jupyter, Octave, Logger Pro, Visual Studio, UNIX, MacOS, Windows