



₩jc368@nyu.edu

(n) jcho124

in jackiewcho

WORK EXPERIENCE

NASA Kennedy Space Center (NE-XA)

Software Engineer Pathways Intern (Co-op)

- Jan. 2020 Ongoing | Florida
- Develop a full-stack, dynamic web app that automates data management and allows real-time, collaborative editing using 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 code requirements and offering software design improvements.
- Collaborate with customers and 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 from 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

- $\bullet \ \ \text{Developed an interactive data visualization of NASA Wikis in D3.js, improving navigation of 60,000+ pages/links.}$
- 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/framework 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.
- \bullet 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.
- $\bullet \ \ \text{Updated computers to latest Windows operating systems using SCSM and maintained hardware \& software components.}$

EDUCATION

New York University 2016-2021

B.A, Computer Science/Mathematics3.72 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, H2O Flow, Logger Pro, Visual Studio, UNIX, MacOS, Windows