Daniel Ko (US Citizen)

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↑ https://ko28.github.io ↑ ↑ ko28 ↑ daniel-ko1

Professional Experience

TDS Telecom Software Engineering Intern

Madison, WI Sept 2019 – Present

- Addressed regular production bugs and improvements in enterprise **Java** applications using **JIRA** to prioritize tasks and utilized **CI/CD** pipelines for rapid development and deployment.
- Developed **Python** script that used the **ArcGIS API** to automate uploading service definition files to and from a remote server, increased upload speeds by 80%.
- Developed, refactored, and upgraded legacy **Perl** web applications and scripts on an Operations Support Systems (NetExpert) server, which interacted with internal **RESTful** services and **SQL** servers. Web applications used by more than 1,000 field technicians.

Juni Learning Computer Science Instructor

Remote Sept 2019 – Jan 2019

- Individually taught 8 students aged 8-16 Scratch, Python, and Java (AP Computer Science).
- Successfully taught trial sessions resulting in more than 50% enrollment rate.

NASA 2019 Student Launch Initiative Chief Hardware Engineer

Madison, WI Sept 2018 – June 2019

- Developed full stack application for our project: *Measurement of Aerosols in Lower Atmosphere Using Optical Detection*.
- Included communication between payload and telemetry module to ground computer using a **XBee** module using serial. Ground computer had a **Python** backend which used NumPy and pandas to parse through and analyze telemetry and payload data. **Bootstrap** frontend for interactive dashboard with live 3D model tracking the gyroscope sensor.

Yu Lab (University of Wisconsin - Madison) Research Intern

Madison, WI Feb 2018 – Sept 2018

Researched various genes in the Aspergillus genus and their effects on sporic life cycle.

West High School AP Calculus & Algebra Teaching Assistant

Madison, WI Sept 2017 – June 2018

• Spent 1 year extensively helping students with classwork, homework, and test reviews.

EDUCATION

University of Wisconsin - Madison

Madison, WI

B.S. in Computer Science

Jan 2020 - Dec 2022

3.95/4.00 Cumulative GPA

Relevant Coursework: Discrete Mathematics, Linear Algebra, Multivariable Calculus, Data

Structures, Algorithms

Skills

Programming Java, Python, Perl, C/C++, SQL, Bash, HTML, CSS, Javascript

Tools Vim, Tmux, Git, JIRA, Jenkins, *nix, LATEX

Languages English, Korean

Miscellaneous Red Cross Adult and Pediatric First Aid/CPR/AED Certification

AWARDS

• Foreign Language and Area Studies (FLAS) Fellowship, U.S. Department of Education	2020
 STEM Engagement Award (2nd), NASA Student Launch Initiative 	2019

• Altitude Award (3rd), NASA Student Launch Initiative 2019

• Social Media Award (2rd), NASA Student Launch Initiative 2019

• 1st Place, Rocket for Schools Competition (cooperation with Gilroy and Ane Lab) 2018, 2019

• National Finalist, Team America Rocketry Challenge 2018