

# Daniel Ko (US Citizen)

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|----------------------------|---|---|
| EDUCATION                  | <b>University of Wisconsin - Madison</b><br>B.S. in Computer Science<br>3.9/4.0 Cumulative GPA  | Madison, WI<br>Jan 2020 – Dec 2022  |
| PROFESSIONAL<br>EXPERIENCE | <b>Zendesk</b><br><b>Software Engineering Intern</b> <ul style="list-style-type: none"><li>Collaborated closely with local and global team members to build scalable, high performance products and services as part of the Engineering Co-Op program.</li></ul> <b>TDS Telecom</b><br><b>Software Engineering Intern</b> <ul style="list-style-type: none"><li>Addressed regular production bugs and improvements in enterprise <b>Java</b> applications using <b>JIRA</b> to prioritize tasks and utilized <b>CI/CD</b> pipelines for rapid development and deployment.</li><li>Developed <b>Python</b> script that used the <b>ArcGIS API</b> to automate uploading service definition files to and from a remote server, increased upload speeds by 80%.</li><li>Developed, refactored, and upgraded legacy <b>Perl</b> web applications and scripts on an Operations Support Systems (NetExpert) server, which interacted with internal <b>RESTful</b> services and <b>SQL</b> servers. Web applications used by more than 1,000 field technicians.</li></ul> <b>Juni Learning</b><br><b>Computer Science Instructor</b> <ul style="list-style-type: none"><li>Individually taught 8 students aged 8-16 <b>Scratch</b>, <b>Python</b>, and <b>Java</b> (AP Computer Science).</li><li>Selected to be one of the few trial instructors to represent Juni Learning to prospective students. Successfully taught trial sessions resulting in more than 50% enrollment rate.</li><li>Taught with a pedagogical philosophy based on project-based learning and praxis. Emphasized critical thinking and risk-taking during lessons by presenting myself as a knowledgeable collaborator rather than an source of infallible facts.</li></ul> <b>NASA 2019 Student Launch Initiative</b><br><b>Chief Hardware Engineer</b> <ul style="list-style-type: none"><li>Developed full stack application for our project: <i>Measurement of Aerosols in Lower Atmosphere Using Optical Detection</i>.</li><li>Included communication between payload and telemetry module to ground computer using a <b>XBee</b> module using serial communication. Ground computer had a <b>Python</b> backend which used SciPy and pandas to parse through and analyze telemetry and payload data. <b>Bootstrap</b> frontend for interactive dashboard with live 3D model tracking the gyroscope sensor.</li></ul> <b>Yu Lab (University of Wisconsin - Madison)</b><br><b>Research Intern</b> <ul style="list-style-type: none"><li>Researched various genes in the <i>Aspergillus</i> genus and their effects on sporic life cycle.</li><li>Inoculated various fungal cultures with target genes knocked out and performed western blot on those samples.</li></ul> | Madison, WI<br>Oct 2020 – Present<br><br>Madison, WI<br>Sept 2019 – Oct 2020<br><br>Remote<br>Sept 2019 – Jan 2020<br><br>Madison, WI<br>Sept 2018 – June 2019<br><br>Madison, WI<br>Feb 2018 – Sept 2018 |
| SKILLS                     | <b>Programming</b> Java, Python, Perl, C, MATLAB, SQL, Bash, HTML, CSS, Javascript<br><b>Tools</b> Vim, Tmux, Git, JIRA, Jenkins, *nix, L <sup>A</sup> T <sub>E</sub> X<br><b>Languages</b> English, Korean<br><b>Miscellaneous</b> Red Cross Adult and Pediatric First Aid/CPR/AED Certification   |   |
| AWARDS                     | <ul style="list-style-type: none"><li>Foreign Language and Area Studies (FLAS) Fellowship, U.S. Department of Education 2020</li><li>STEM Engagement Award (2nd), NASA Student Launch Initiative 2019</li><li>Altitude Award (3rd), NASA Student Launch Initiative 2019</li><li>Social Media Award (2nd), NASA Student Launch Initiative 2019</li><li>1st Place, Rocket for Schools Competition (cooperation with Gilroy and Ane Lab) 2018, 2019</li><li>National Finalist, Team America Rocketry Challenge 2018</li></ul>  |   |