

**Danny Wu**  
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## EDUCATION

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<b>Duke University</b> <i>B.S. in Computer Science, Physics</i>	Durham, NC GPA: 4.0/4.0
<b>University of California, Berkeley</b> <i>B.S. in Elec. Engineering &amp; Computer Science, Engineering Physics (transferred)</i>	Berkeley, CA GPA: 4.0/4.0
<b>Thomas Jefferson High School for Science &amp; Technology</b> <i>Advanced Studies Diploma</i>	Alexandria, VA GPA: 4.5/4.0, ACT: 36/36

## EXPERIENCE

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<b>Google</b> <i>Incoming Software Engineering Intern</i> <ul style="list-style-type: none"><li>• Video DRX and Advertisements Team.</li></ul>	New York, NY Jun 2019 - Aug 2019
<b>NASA</b> <i>Software Engineering Intern</i> <ul style="list-style-type: none"><li>• Created a Java application which alerts spacecraft mission operators of anomalies in the telemetry data stream.</li><li>• Developed a main dashboard view of aggregated alerts using Java servlets, AJAX, and Hibernate.</li><li>• Created database-driven data visualization page using Highcharts.js.</li><li>• Implemented URL routing throughout single-page application with JavaScript.</li></ul>	Laurel, MD Jun 2018 - Aug 2018
<b>PrepFactory</b> <i>Product Development Intern</i> <ul style="list-style-type: none"><li>• Worked alongside CEO on product design, UI/UX testing, and user onboarding.</li><li>• Prototyped over 150 interactive web modules in LaTeX to teach ACT/SAT test material.</li></ul>	Washington D.C. Jul 2016 - Aug 2016

## RESEARCH

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<b>Duke Neutrino &amp; Cosmology Group</b> <i>Advisor: Christopher Walter</i> <ul style="list-style-type: none"><li>• Working on the LSST Dark Energy Science Collaboration.</li><li>• Created a simulated Hubble Telescope image using Python, GalSim, AstroPy, and ds9.</li><li>• Rewriting image exposure checker tool from PHP to Python.</li></ul>	Durham, NC Sep 2018 - Present
<b>Berkeley Department of Mathematics</b> <i>Advisor: David Keating</i> <ul style="list-style-type: none"><li>• An empirical study of the 6-vertex model's phase transitions.</li><li>• Performed computational modeling of the 6-vertex model's steady-state distribution using Python and OpenCV.</li><li>• Analyzed a program written in C that executes a Markov chain Monte Carlo method to calculate the n-flip distribution of the 6-vertex model.</li></ul>	Berkeley, CA Oct 2017 - Jun 2018

## PROJECTS

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<b>Image Processing:</b> The Hough transform, Canny edge detection, and the Sobel filter using OpenCV.
<b>Scheme Interpreter:</b> Python-based interpreter that evaluates Scheme (Lisp) commands.
<b>Correct Elect:</b> Java web application that helps voters match with aligning local politicians using the Vote Smart API.

## SKILLS

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**Languages:** Python, Java, SQL, HTML, PHP, JavaScript  
**Awards:** CAA Leadership Award, ThinkChicago Scholar, Edward Kraft Award, Berkeley SPOT Award, National Merit Finalist  
**Activities:** TEDxDuke, Amgen Web Developer (work-study), Duke Club Soccer, Wayne Manor SLG  
**Interests:** Cosmology, space exploration, FIFA 19, Green Bay Packers, thrift shopping, and home haircuts