

# DAVID BREWSTER

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Focus	I am a Computer Science Major with a Minor in Mathematics. I focus on Theoretical Computer Science and Cryptography. I am looking for internship and co-op opportunities for 2017.
Professional Experience	<p><b>Google Inc., New York, NY</b> <i>Software Engineer, exp. May 2017 – August 2017</i></p> <ul style="list-style-type: none"><li>Will help develop an autonomous system for predicting the root causes of faulty computers/machines</li></ul> <p><b>Volume Technologies, Urbana, IL</b> <i>Application Developer, October 2016 – Present</i></p> <ul style="list-style-type: none"><li>Developed auto-email tasks and live twitter feed stream web app for the tech startup</li></ul> <p><b>Carl R. Woese Institute for Genetic Biology, Champaign, IL</b> <i>Research Assistant for Professor Sergei Maslov, October 2016 – Present</i></p> <ul style="list-style-type: none"><li>Implementing a spectral graph convolutional neural network to classify cancer types based on DNA mutations running on an Argonne National Laboratory supercomputer using NumPy, TensorFlow, and Keras</li></ul> <p><b>Gloucester Parks and Recreations, Gloucester, VA</b> <i>Application Developer, exp. May 2015 – June 2016</i></p> <ul style="list-style-type: none"><li>Co-designed and co-developed an Android mobile navigation application for the 2016 Gloucester County Daffodil Festival as a replacement for the paper maps used in previous years</li></ul>
Projects	<p><b>Variations on a Theme, Urbana, IL</b> <i>Application Developer, September 2016 – December 2016</i></p> <ul style="list-style-type: none"><li>Helped design and implement a melody/theme finding algorithm given a MIDI file</li></ul> <p><b>React, Urbana, IL</b> <i>Application Designer and Developer, October 2016 – December 2016</i></p> <ul style="list-style-type: none"><li>Created an Android app that matches users based on human face analytics</li></ul>
Competitions	<p><b>MITRE CTF</b> <i>September 2016</i></p> <ul style="list-style-type: none"><li>Team placed 15<sup>th</sup> in an online cybersecurity competition with over 200 teams</li></ul> <p><b>Phillips Academy CTF</b> <i>April 2016 – May 2016</i></p> <ul style="list-style-type: none"><li>Team placed 8<sup>th</sup> in an online cybersecurity competition with over 400 teams</li></ul> <p><b>Project Euler</b> <i>March 2015 – Present</i></p> <ul style="list-style-type: none"><li>A site with a collection of tough mathematical problems</li><li>I am ranked in the 99<sup>th</sup> percentile (top 6k of 700k members)</li></ul>
Education	<p><b>University of Illinois at Urbana-Champaign, Champaign, IL</b> <i>Bachelor of Science in Computer Science exp. May 2019</i></p> <ul style="list-style-type: none"><li>Notable Coursework: Discrete Structures, Data Structures, Number Theory, Linear Algebra</li><li>Member of ACM-ICPC group and IPL (Illinois Programming League)</li></ul> <p><b>Governor's School for Science and Technology, Hampton, VA</b> <i>Advanced Diploma with focus in Scientific Programming June 2016</i></p>
Programming Skills	<ul style="list-style-type: none"><li>Proficient: Python, Java, C#, F#, WPF, J (APL dialect)</li><li>Intermediate: C++, Haskell, NumPy, Keras</li><li>Basic: Bash, C, Rust, JavaScript</li></ul>