

# Matthew Zhu

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EDUCATION	<b>Carnegie Mellon University</b> , Pittsburgh, PA B.S. in Mathematical Sciences and Computer Science • Cumulative GPA: 3.89 / 4.00 • Selected Coursework: imperative and functional programming, theoretical computer science, computer systems, parallel and sequential data structures and algorithms	Expected May 2018
SKILLS	Proficient: Python, C, JavaScript, HTML5, CSS3, SML Familiar: Java + Android, Intel x86-64 Assembly, Perl, Ruby on Rails, Bootstrap, AngularJS	
EXPERIENCE	<b>Motorola Solutions</b> , Plantation, FL Embedded Software Engineer • Developed 2 Perl tools to test wireless firmware update downloads for two-way radios; the tools read the updates as chunks of binary data, send the reconstructed bytes to a radio, and verify validity by parsing the resulting radio logs • Underwent code review and gave 2 progress demos to my Agile/Scrum team  <b>Art of Problem Solving</b> , San Diego, CA Online School Assistant • Gave detailed feedback on online school submissions in Python/Java programming and all areas of math from pre-algebra to calculus, emphasizing problem-solving and critical thinking • Wrote solutions for national math competition problems, which were then used in online school teaching materials	Jun 2015 – Aug 2015  Jan 2014 – Jun 2015
PROJECTS	<b>MAO Timers</b> • Web app that accurately simulates proctors in competition testing environment for 8 test types administered by Mu Alpha Theta math honor society • In official use since the 2014 National Convention  <b>GamesVault</b> • Ruby on Rails web app that scrapes several websites for game prices and information to create APIs for displaying information to game buyers • Designed front-end and linked it with the database using Ruby and Ajax; built with one other teammate  <b>Ten-Second Planetarium</b> • HTML5 canvas visualization using math and astronomical data that depicts the passage of time using the benchmark that ten seconds represents one year  <b>Subvert: Resistance Universe Toolkit</b> • Android app that implements all the gameplay of the party board games The Resistance and The Resistance: Avalon, so they can be easily played without a game board or game pieces	
ACADEMIC HONORS & AWARDS	Ranked in top 25% in Putnam Mathematical Competition 15 / 120 points; over 4000 participants nationwide  Mellon College of Science Dean's List with High Honors For attaining a semester GPA of at least 3.75  Emerson National Merit Scholarship Award  National Merit Scholarship Finalist	2014  Fall 2014 – Spring 2015  2014 – 2018 2014