

# MICHAEL HAMMER

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- OBJECTIVE** Apply my computer science and engineering skills to tackle challenging problems in a stimulating team environment, thereby making a positive impact to an organization and society.
- EDUCATION** **Bucknell University** *Graduated May 2017*
- Major: B.S. in Computer Science and Engineering | Minor: Mathematics
  - GPA: 3.9 | Magna Cum Laude | Dean's List (every semester) | Distinguished Student Award
  - Tau Beta Pi Engineering Honors Society
- WORK EXPERIENCE**
- Raytheon Integrated Defense Systems - Software Engineer I** *June 2017 - Present*
- Clearance Level - SECRET
  - Enhancing protocols for monitoring the health of Patriot Missile System components in combat and during development
- NASA Jet Propulsion Laboratory Internship** *May 2016 - Aug 2016*
- Worked on developing a communication protocol with the European Space Agency using the CCSDS international networking standards for space applications
  - Modified European networking software in Java to demonstrate transporting JPL space telemetry
- NASA Jet Propulsion Laboratory Internship** *May 2015 - Aug 2015*
- Developed web applications to improve Mars Relay Telemetry planners' ability to visualize multiple time references (for Mars and Earth) during their Mars-Orbiter-Earth relay planning process
  - Used HTML, CSS, Javascript, and JQuery to design a dynamic calendar that graphically depicts Earth-time and Mars-time (Sols) for each Mars mission
- NASA Jet Propulsion Laboratory Internship** *May 2014 - Aug 2014*
- Created software to help visualize and assess the performance of the science data processing system used by the Orbiting Carbon Observatory mission
  - Fetched space telemetry (data) with SQL commands, parsed data into JSON format with Python, and visualized information via a web interface
- Bucknell University Teaching and Learning Center** *Aug 2014 - May 2017*
- Conceived, implemented and led Bucknell's first computer science study group program
  - Led Study Groups in Computer Science (3 semesters), Physics (1 semester), & Calculus (1 semester)
- PROJECTS**
- Lewisburg Children's Museum Rocket Ship Game** *Aug 2016 - May 2017*
- Developed an interactive gaming system using the Unity game engine to teach children about rocket launch principles in the Lewisburg Children's Museum's Space Exhibit
- Fitness Assistant AI** *May 2018 - Present*
- Developing a web based fitness coach to help people reach their fitness goals by using data analysis and artificial intelligence
- Raspberry Pi Car** *May 2015 - Aug 2015*
- Used a Raspberry Pi computer to construct a car controlled via an iPhone over Wi-Fi
- Solar System Simulation** *Jun 2014 - Jul 2014*
- Created interactive, dynamic model of the solar system using fundamental force calculations
- TECHNICAL SKILLS**
- Primary Languages** Python(5/5), Java(4/5), C(4/5)
- Web Skills** Proficient: HTML, CSS, JavaScript, jQuery  
Novice: Flask, React, Bootstrap
- Operating Systems** Mac OS X, Windows, Unix
- Familiarity** Haskell, C++, MySQL, R, MATLAB
- INTERESTS**
- Technical** Artificial Intelligence, Networking, Web Development, Data Mining
- Recreational** Meeting new people, Healthy living, Traveling, Cooking, Magic, Comedy