# William Ganucheau

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## **Education**

### **Carnegie Mellon University**

August 2014 - August 2017

B.S Computer Science, Minor in Robotics, 3.9 Cumulative GPA, Dean's list every semester, Phi Beta Kappa

## **Experience**

#### L3 ASV - Software Engineer

August 2017 - present

- Lead researcher, designer, and developer of real-time path planning and collision avoidance system. Primary duties involve researching current state-of-the art in path planning, implementing them in performant C++, and developing tests and metrics to evaluate performance to facilitate rapid iteration and productization
- Responsible for the project through its entire lifetime, from early conception and planning to productization and delivery
- Developed Python/Javascript-powered test visualization tool to visualize planner performance and measure regressions and improvements
- Participate in regular code review and standups with other team leads
- Produce weekly status reports to convey progress and obstacles to key management/development personnel

#### NASA Jet Propulsion Laboratory - Software Developer Intern

Summer 2016

- Designed and developed embedded software for an experimental lunar rover
- Led 15 member avionics team
- Chose parts such as microcontrollers and sensors and interfaced them with one another
- Developed robust communications protocols over UDP
- Programmed entire command & data-handling system

#### **Autonomous Surface Vehicles - Software Engineering Intern**

*Summer 2015* 

• Developed incremental synchronization protocol that greatly reduced bandwidth consumption allowing large control plans to be transferred from land to autonomous vessels

#### **Skills**

Advanced - C/C++, Linux, Qt, Mercurial

**Proficient -** Python, Javascript/Node.js, HTML, Git

I also have experience working with the Atlassian suite of project management tools (Confluence, JIRA) as well as Reviewboard for code review.