

# Kevin Bradner

---

5868 Kenwood Rd.  
Madeira, OH 45243

kmb172@case.edu  
(513) 365-7286

## Skills:

Software engineer focused on intelligent planning / decision making for robotics  
Research: Path Planning, Robotic Coverage, Multi-Robot Systems  
Programming: C++, Python, Haskell (Proficient); Java, MATLAB (Some Experience)  
Robotics & Simulation Software: Robot Operating System (ROS), Gazebo, MoveIt, Unity  
Windows and Linux-based operating systems, Bash, Git

## Work Experience:

Programmer, NASA Ames Research Center Intelligent System Division CAS ATTRACTOR Project – Reliable Autonomy Research Robotic Coverage Research	July 2018 – Present
Robot Manipulation Data Project, Mobile / Dextrous Robotics Lab, CWRU	Jan 2018 – May 2018
Robotics Software Engineer, Lonsberry Engineering	June 2017 – Dec 2017
Robotic Haptics Researcher, Mobile / Dextrous Robotics Lab, CWRU	June 2017 – Aug 2017
Teaching Assistant, Intro to Artificial Intelligence	Oct 2016 – Dec 2016
Research Programmer, NASA Academy, Marshall Space Flight Center Electron Microscopy and X-Ray Simulation with Dr. Jessica Gaskin Small Satellite Component Mechanical Design with Dr. Peter Jenke	June 2016 – Aug 2016

## Education: Case Western Reserve University

M.S., Computer Science (May, 2020) Thesis: Path Planning for Variable Scrutiny Robotic Coverage	GPA: 3.500
B.S., Computer Science (May, 2019)	GPA: 3.819 (magna cum laude)

### Coursework:

**Robotics:** Modern Robot Programming, Mobile Robotics, Probabilistic Robotics, Robotics Research Survey  
**Artificial Intelligence:** Machine Learning, Deep Learning, Artificial Intelligence I & II, Computer Vision  
**Math:** Calculus I-III, Abstract Linear Algebra, Discrete Mathematics, Probability, Causal Inference  
**Physics:** Mechanics, Statics, Dynamics, Thermodynamics, Heat and Mass Transfer, Electricity and Magnetism  
**Computers / Electronics:** Computer Networks, Algorithms, Databases, Circuits, Operating Systems

## Extra-Curricular Activities/Community Involvement:

### Design, Build, Fly! at Case Western Reserve University

- Participate in an annual AIAA competition of the same name

### Boy Scouts of America: Eagle Scout

- Led a group of 60 scouts through regular service projects and campouts
- Selected to attend National Youth Leadership training in summer of 2010

### Junior Engineering Technical Society (JETS): Team Captain

- Team scored in 1<sup>st</sup> in state, 3<sup>rd</sup> in nation in 2012 for our division

## Awards & Recognition

- Herbold Fellowship
- Case Leadership Scholarship
- Case Western Reserve University Michelson-Morley Merit Scholarship
- Case Western Reserve University Junior-Senior Scholarships for Academic Achievement
- National Merit Scholar
- Dean's High Honors, Case Western Reserve University
- Madeira High School Valedictorian