# KENNY BOWERS

kpb3rd@aol.com 864.940.6145 Atlanta, GA www.linkedin.com/in/kenny-bowers/

## EXPERIENCE

### Senior Autonomy Engineer - Autonomy Lead

**Area-I, Inc (an Anduril Company)**

Oct 2020 – Current Atlanta, GA

- Directed the C++ development of multiple concurrent fixed-wing robotics projects. Acted as SME for robotics and algorithms.
- Demonstrated ability to quickly develop and scope robust solutions by delivering mission capabilities ahead of schedule and by achieving successful high-profile flight tests.
- Initiated and established team practices for consistent unit testing, continuous integration, code style, and interview process.
- Implemented an automated hardware code deployment method using Docker and Python, saving labor time and reducing risk of user error.

### Research Engineer II

**Georgia Tech Research Institute (ATAS Lab)**

July 2017 – Oct 2020 Atlanta, GA

- Led the concept, design, and C++ implementation of novel real-time planning algorithms for multi-agent autonomous aerial systems.
- Published three conference papers on fundamental research in bio-inspired swarm algorithms for distributed autonomous multi-robot teams.
- Developed machine learning tools for GTRI's open-source multi-agent robotics simulator (SCRIMMAGE) to automate parameter optimization.

### Software Engineer

**Boeing Research and Technology (The Boeing Company)**

June 2014 – July 2017 Charleston, SC

- Published four patents on robotic control and airplane surface inspection.
- Developed algorithms for robot arm path planning and inkjet head control to enable painting directly onto 3D aircraft surfaces.
- Designed real-time hardware/software solution for inspecting the fuselage for micrometer defects during manufacturing. This included localizing the scanners to the surface of the airplane in order to display defect locations to the operator.
- Led the development of a real-time system to synchronize and calibrate 60+ cameras and sensors across multiple PCs and microcontrollers.
- Managed the collaboration between Boeing and Clemson University to sponsor Clemson's ECE Senior Project, and designed the project challenge for the students.

## STRENGTHS

C++ Python Git Docker CMake ROS SQL/MongoDB

Algorithms Path Planning Computational Geometry Robotics Machine Learning Computer Vision

## EDUCATION

### M.Sc. in Computer Science

**Georgia Institute of Technology**

2016 - 2018 (part-time)

Robotics and Computational Perception

### B.Sc. in Computer Engineering

**Clemson University**

2010 – 2014

## PUBLICATIONS

### Patents

- et al., A. B. (2018, 2019). Verification of tow placement by a robot.
- et al., A. B. (2019). Automated controls for contoured surface inkjet printing.
- et al., L. W. (2019). Live metrology of an object during manufacturing or other operations.

### Conference Proceedings

- et al., G. C. (2018). Bio-inspired nest-site selection for distributing robots in low-communication environments, Practical Applications of Agents and Multi-Agent Systems. 30% Acceptance.
- et al., K. B. (2018). Trust-based information propagation on multi-robot teams in noisy low-communication environments, Distributed Autonomous Robotics Symp. 32% Acceptance.
- et al., L. S. (2018). Bio-inspired role allocation of heterogeneous teams in a site defense task, Distributed Autonomous Robotics Symp. 32% Acceptance.