Address
City State Zip

Hunter Figgs

(XXX) XXX-XXXX
hunter.figgs@gmail.com

Employment

Robotics Software Engineer — **ThorDrive** — **July 2022 – Present**

- LiDAR Sensor Grabber
  - Reduced computation load by 60% after profiling software module with Valgrind Callgrind and eliminating recurring memory allocations with RAII
  - Improved data latency by 3 milliseconds by refactoring code to use ROS zero-copy transfer
  - Rewrote networking code to utilize Boost.ASIO to make code robust and maintainable
- Flight Trajectory Prediction
  - Developed real-time airplane trajectory prediction module to assist with autonomous vehicle navigation
  - Implemented motion model to reliably predict short-term airplane movements
- Sensor Calibration
  - Adapted open-source calibration software into robot production to save days of manual labor

Software Engineer Intern — **ThorDrive** — **May 2021 – Dec. 2021**

- Vehicle Control & Diagnostic GUI
  - Developed Python GUI application for vehicles to improve user experience/efficiency
  - Integrated with ROS to send vehicle commands, report diagnostics (GPS fix, battery health, etc.), log data
- Flight Data Grabber
  - Created module to capture and process real-time flight data to aid vehicle perception

DevOps/TestOps Intern — **Siemens Healthineers** — **May 2020 – Aug. 2020**

- Server Usage Dashboard
  - Built web dashboard to report statistics on MS Azure build server utilization
  - Reports were used to make decision on $500,000 purchase of server equipment
- Chosen for Intern Spotlight of the Week

Teaching Assistant — **Engineering Dept. Ohio State** — **Aug. 2019 – Dec. 2019**

- Taught advanced programming section of Honors Fundamentals of Engineering course
  - Topics: technical writing, eng. design process, eng. ethics, C/C++, MATLAB

Education

Columbus, OH — **Ohio State University** — **Aug. 2018 – May 2022**

- B.S. in Computer Science & Engineering, May 2022, GPA: 3.9
  - Coursework: Algorithms; Operating Systems; Databases; Networking; Neural Networks; Computer Vision; Speech and Language Processing; Advanced Artificial Intelligence

Technical Experience

Projects

- **hunterfiggs.com**. Fun personal website to display projects. JavaScript, CSS, HTML
- **NES Zelda Clone** (Autumn 2020). Collaborative school project to recreate classic video game. Implemented A* enemy search, collision detection, and ray-casting lighting system. C#.NET, MonoGame
- **HackOHI/O Hackathon** (2019). 24-hour, top-down shooter in the browser. Implemented modular, file-based level design. JavaScript, p5.js, HTML
- **Robotics Competition** (Spring 2019). Collaborative school project to design robot to navigate course and complete objectives. Implemented PID control system. Placed top 16 out of 100 teams. C++, SolidWorks

Languages and Technologies

- C++; Python; C#.NET; Java, JavaScript/HTML/CSS; PowerShell; SQL
- Boost; ROS; CMake; Visual Studio; Valgrind Callgrind; Kivy; SolidWorks