Jack G. **Kawell**

Software Engineer
www.jack-kawell.com

linkedin.com/in/jack-kawell/
github.com/jgkawell

Education

M.S. in Computer Science, University of Colorado Boulder, Boulder, CO | 2018 – 2020
Concentration: AI and Robotics (*cairo-lab.com*)

B.S. in Engineering Physics, Samford University, Birmingham, AL | 2014 – 2018
Minors: Computer Science, Mathematics

Skillset

Languages: **proficient** {Python, Java, C#, JavaScript/TypeScript, SQL, Mathematica, Bash/Shell}, **familiar** {C++, HTML/CSS, Go, MATLAB}
Technical: Docker, Git, Linux, REST, Agile, Node, Express, NoSQL, AWS, Azure, gRPC, Jenkins, Travis, ML/AI, ROS, Spring, TDD
Non-technical: Leadership, communication, collaboration, problem solving, analysis, life-long learning

Experience

Software Engineering Consultant, Circadence, Boulder, CO | June 2019 – Present
- Implemented an MVP for a security application utilizing a microservice fleet.
- Improved an optical character recognition (OCR) system for parsing images and PDFs.
- Moved across the stack from the data pipeline (Python) to the user experience (JavaScript/React).
- Worked on an agile, distributed team across multiple time zones.
- Skills utilized: Agile, Bash/Shell, Docker, Git, gRPC, JavaScript, Linux, Python, REST

Graduate Researcher, University of Colorado Boulder, Boulder, CO | August. 2018 – May 2020
- Extended the Open Motion Planning Library (OMPL) to enable injection of data from Robot Operating System (ROS) connected sensors.
- Containerized ROS and OMPL development environments for graphical simulations across various host types.
- Created an algorithm for augmenting a machine learning agent using novice user feedback (paper in submission for IROS 2020).
- Focused on making all projects easily deployable (through containerization) and extensible (through modularization).
- Skills utilized: Bash/Shell, C++, Docker, Git, Linux, ML/AI, Python, ROS, Travis

IS Intern / Software Developer, Altec Industries, Birmingham, AL | February 2018 – August 2018
- Developed internal-facing APIs on the Common Business Services team.
- Architected database designs and management on both AWS and Oracle.
- Created a long-term use application to transition data from a legacy local storage system to AWS.
- Managed aspects of the DevOps lifecycle including API deployments and automated code testing.
- Worked on a fast-paced, fully agile team.
- Skills utilized: Agile, AWS, Bash/Shell, Docker, Git, Java, Jenkins, Linux, REST, Spring, SQL

Personal Projects

Real-time, Cross-platform Mobile Game, Birmingham, AL | August 2017 – December 2017
- Collaborated with an agile team to develop a real-time, cross-platform mobile game using Xamarin.Forms in the .NET framework. The application uses a robust system of cloud services including SQL and NoSQL databases, and an Azure App Service. Focused on the backend development and maintenance for the application to allow consistent, fast, and secure connections for all connected clients to the game.
- Skills utilized: Agile, Azure, C#, Git, MongoDB, SQL

Autonomous Rover, Birmingham, AL | January 2017 – May 2018
- Collaborated with a team to build an autonomous rover that can navigate simple environments as well as traverse smaller obstacles. Developed an algorithm that avoids obstacles while choosing an optimal route. Integrated a scanning Lidar for depth sensing.
- Skills utilized: Bash/Shell, C++, Git, Linux, Python, ROS