EducationUniversity

University of Texas at Dallas

2013-2017

• BS Computer Science 2017

Experience

Software Engineering internship at Apcon

2016-2017

- Finding and fixing bugs, performing static code analysis
- Migrated software to cloud and improved Linux installation
- Developed server back-end and front-end using Adobe Flex and C++

Junior Software Engineer at IXIA/Keysight

2018-2020

- Developed C/C++ software to extract data from network packets for visualization
- Handle parsing of TCP/UDP packets and other Layer 7 protocols
- QA tested regression tests using Robot and in-house traffic generator
- Set up Docker/Kubernetes environment to run our product virtually

Projects

Fencing Journal and Ranking Website

2021

- Used Docker, Flask, Vue.js, and MongoDB to build a full-stack web app
- Deployed and maintained on DigitalOcean's VPS

Fencing Tournament Organizer Web Service

2018

- Developed in Python and Flask to run fencing tournaments
- Stores results in a database to allow for live viewing of results
- Used by the Southwest Intercollegiate Fencing Association
- (github.com/rkblake/FencingTournamentTool)

Solar System Simulator

2017

- Simulates orbital mechanics using Newtonian physics
- Uses OpenGL and SDL2 to display planets and stars
- (github.com/rkblake/SolarSim/)

ECS Maze Solving Toy Car

2014

- Freshman Engineering semester project, team of 5
- Uses Raspberry Pi, ultrasonic sensors and a Python script to navigate a maze

RTS AI Proiect

2010-2012

- Worked in 2 person team on Real-Time Strategy playing AI
- Created an AI that manages units and resources
- Dortmund University of Technology's Computational Intelligence and Games (CIG) 2011 Starcraft AI competitor (1s11-www.cs.tu-dortmund.de/rts-competition/starcraft-cig2011)

Skills

- Languages: C/C++, Python, Javascript, Erlang, Lua ...
- Frameworks: Flask, OpenGL, SDL2, Node.js, Vue.js, PostgreSQL, MongoDB...
- Other Skills: git, gdb, Jenkins, Docker, Linux, AWS, Jira, Agile . . .

Miscellaneous

- Participated in Game Jams programming games in 48-hours
- 10 Years competitive Fencing, previous captain of the UTD Fencing Club
- Competed in Cyber security competition with UTD's Computer Security Group
- Ask me (github.com/rkblake) about my other projects!