Joseph Krusling

2360 Bethel New Richmond Road
Bethel, OH 45106
www.JosephKrusling.com
Phone: 513-646-8321
E-Mail: joseph@krusling.net

Technical Skills

Languages

Proficient: Java, JavaScript/Node
Exposure: C#, Python, HTML/CSS, C++, PHP, GLSL, Lua

Software and Technologies

Git, IntelliJ, WebStorm, Visual Studio, Mathematica, MATLAB, MySQL, Amazon EC2 and S3, Vue

Work Experience

Siemens PLM Software – Chief Technology Office **Jan 2018 – Present**
Software Development Co-op Milford, OH
Created chatbot framework to allow other teams to add conversational intelligence to their products.
Used machine learning to analyze various employee metrics and presented actionable reports to CEO.

EST Analytical **Sept 2017 – Present**
Part-time Software Developer Fairfield, OH
Developed a Java library for precisely controlling a 3-axis robot used in laboratory settings.
Designed front end applications for controlling various lab equipment using Vue, Socket.IO and Spark.
Lead the initiative to unify various laboratory instruments under a universal API format.

Siemens PLM Software – Product Driven Services **May 2017 – August 2017**
Software Development Co-op Milford, OH
Automated the testing of a mission-critical web application using Java, Selenium, and JavaScript.
Discovered and repaired several major security vulnerabilities in a customer-facing web application.

Education

Bachelor of Science in Computer Science **Pre-Junior, Class of 2020**
University of Cincinnati **3.6 GPA**

Personal Projects

Automated Programming Arena **2017**
Developed multiplayer web game where players control their character by writing JavaScript. Designed front end application using Canvas and Socket.IO. Built auto-scaling backend in Node on AWS EC2.

Multiplayer Board Game in Python **2016**
Recreated *Settlers of Catan* in Python using Twisted for client-server network communication.
Designed flexible layout system for rendering UI elements using PyGame.

MMORPG Gameplay Automation Research **2015 – 2016**
Designed custom Java game client to extract data from the game using bytecode manipulation.
Automated gameplay via simulated mouse and keyboard events. Disclosed research to game developers to help improve their bot and cheat detection strategies.

Efficient Ray Tracer **2014 – 2015**
Created voxel ray tracer that renders high resolution scenes in real time using Java, GLSL and LWJGL.
Developed strategy for efficiently storing and traversing scene geometry in parallel on the GPU.

Co-op Availability: Fall 2018, Summer 2019