Johnny Sellers

Software Engineer

Software engineer with background in applied mathematics; experience in algorithm design, analysis, and implementation; contributions to open-source software; experience with web scraping, machine learning libraries, and data visualization; aptitude for problem solving and solution validation.

Contact Info

Website

https://johnsell620.github.io

E-mail

Phone

Skills

Languages:

- C++
- Python
- PHP
- SQL
- JavaScript
- Bash

Computation:

- Matlab
- NodePy
- Clawpack

Data/Learning:

- TensorFlow
- Keras
- Pandas

WebDev:

- HTML5, CSS3
- Sass, Susy
- REST APIs

Frameworks:

- React.js
- jQuery
- Bootstrap

Build Tools:

- GNU Make
- Gulp
- Webpack

Database:

- MySQL
- phpMyAdmin

Experience

2014-2016 **Engineering Technician**

Monsanto Company, RTP, NC

- Enhanced data-acquisition software and procedures leading to improved diagnoses and reductions in downtime up to 30% for multiple automated-greenhouse processes.
- Operation and troubleshooting of SCADA systems for climate control, plant movement, and data acquisition automation lines.
- Provided key operational insight for process improvement.

2014 **Associate Mechanical Engineer**

Shipman Technologies, Inc., Durham, NC

- Lead engineer developing electric-powered bicycle components from customer specification.
- Headed re-engineering for manufacturability changes to materials and design, devised machining fixtures and assembly setups for high throughput, managed production scheduling.
- Maintained exhaustive documentation in accordance with ISO 9001 standards.

2013 **Undergraduate Research Assistant**

Micro/Nano Engineering Lab, Department of Mechanical and Aerospace Engineering, NC State University, Raleigh, NC

- Aided in experiment setup and literature review for project developing scalable mechanism for rapid, benign extraction of live HeLa cells from growth substrate via electromagnetic actuators.

Education

2019 **University of Washington-Seattle**, MS, Applied Mathematics

Focus in numerical analysis of initial boundary value problems with emphasis on algorithm analysis and implementation; high-performance computing - parallel, distributed, GPU computing; optimization.

2013 **North Carolina State University**, BS, Mechanical Engineering

Developed electromechanical system to move large-scale water purification system in capstone project.

Certifications

Engineering Intern, North Carolina Board of Examiners for Engineers and Surveyors