Johnny Sellers

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PROFESSIONAL SUMMARY

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

EDUCATION

University of Washington-Seattle, MS, Applied Mathematics (2019)

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

North Carolina State University, BS, Mechanical Engineering

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

TECHNICAL SKILLS

Languages: C++, Python, SQL, PHP, JavaScript, Bash

Frameworks: React.js, jQuery, Bootstrap

Computation: Matlab, TensorFlow, Keras, Pandas, Clawpack, NodePy

Web Development: HTML5, CSS3, Sass, Susy, Apache2

Build Tools: GNU Make, Gulp, Webpack

Databases: MySQL

WORK EXPERIENCE

Engineering Technician, Monsanto Company, RTP, NC 2014 – 2016

- 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 multiple SCADA systems for climate control, plant movement, and data acquisition automation lines.
- Provided key operational insight for process improvement.

Associate Mechanical Engineer, Shipman Technologies, Inc., Durham, NC 2014

- 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.

Undergraduate Research Assistant, Micro/Nano Engineering Lab,
Department of Mechanical and Aerospace Engineering, NC State University, Raleigh, NC 2013

- 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.

CERTIFICATIONS

Engineering Intern certified by North Carolina Board of Examiners for Engineers and Surveyors.