

# Johnny Sellers

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## PROFESSIONAL SUMMARY

Full stack web developer with skills in high-performance scientific computing. A hobbyist turned professional, passionate about software usability, scalability, performance. Eager to join a team with a matching esteem for the art of software development.

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## EDUCATION

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

Areas of focus in numerical analysis with particular interest in algorithm analysis, design and implementation; high-performance computing—parallel, GPU, distributed, cluster computing; optimization, neural nets, machine learning.

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

Developed electromechanical system to transport large-scale water purification system as capstone.

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## TECHNICAL SKILLS

**Languages:** C++, Python, JavaScript, PHP, SQL, HTML5, CSS3, Bash

**Development:** React.js, jQuery, Bower, Gulp, Bootstrap, Susy, MySQL, Apache2

**Platforms:** Java EE, Linux/Unix

**Computation:** Matlab, SolidWorks, ANSYS

**Automation:** SCADA Software, PLC time tracing and data logging, SCARA programming and maintenance, cycle-time studies, root-cause analysis, pneumatics, sensors

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## 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. Applied process and data analyses in development of experiment logistics vital to expansion of data-acquisition capabilities. Transcribed work instructions and best-practices documents for operations.

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

2014

Lead engineering role working “concept-to-production” developing electric-powered bicycle components. Headed re-engineering for manufacturability changes, devised machining fixtures and assembly setups for high throughput, and 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, theoretical analysis, and literature review for project developing scalable mechanism for rapid, benign extraction of live HeLa cells from growth substrate via electromagnetic actuators—joint collaboration with UNC-Chapel Hill’s Department of Biomedical Engineering.

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## CERTIFICATIONS

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