JOHN VORSTEN

vorstenjohn@gmail.com | 512-662-8968 | Austin, TX 78748 | linkedin.com/in/john-vorsten

Entry Level Software Developer

Young professional with experience designing building automation and instrumentation systems, building workflow applications in Python, data visualization, and machine learning. I'm looking for opportunities to use my programming, systems design, and data science experience in a challenging environment. **Academic and professional experience in the following areas :**

Workflow application development with Python | Data handling, interpretation, visualization, and automation | Machine learning with Python | Automation and controls systems | Instrumentation, mechatronics | Predicting process behaviors

Education

The University of Texas at Austin Graduate: **December 2017**
Bachelors of Science Mechanical Engineering (GPA 3.7/4.0)

Working Experience

Systems Engineer | Siemens Smart Infrastructure – November 2017 – current

- Design small and large building automation systems including controller I/O, networks, and wiring
- Define the system requirements by analyzing plans, specifications, and contracts
- Assist project managers with revenue goals and project financial health
- Interface with customers, sales, and field employees

Energy Engineer | University of Texas facilities – January 2017 - October 2017

- Use Building Automation Systems, sensors, and field testing to estimate the health of a buildings energy systems
- Extract meaning from collected data and present to management
- Predict process behaviors with dynamic modeling, regression, and data visualization
- Develop energy calculation reports for use in energy savings estimates

Engineering Technician |Texas Department of Transportation, Traffic operations - June 2015 - August 2016

- Data collection, visualization, and interpretation
- Automobile crash statistical modeling and prediction (location and severity based on roadway features)
- Writing, proofreading, and perfecting funding proposals and bid estimates

University Tutor | UT mechanical engineering department - August 2016 - present

- Tutor students in programming, fluids, dynamics, thermodynamics, and other classes
- Build interpersonal relationship and mentor students

Research Internship | UT chemistry department – June - August 2014, Continuation of previous research

- Develop intensive reading and writing skills
- Collaborated between teams to make an effective approach to the research goal

Programming Projects; other experience

Workflow application development and workflow automation – front end and back end using Python
Data visualization using Python and OpenCV
Remote data collection using microcontrollers and radios; Instrumentation (sensors)
Relational & No-SQL database automation (SQL server & Siemens database management application)
Machine learning in Python using regression and categorization machines (Multipolynomial, SVM, Random Forests, LTSM, DNN, dimensionality reduction)

Academic Experience

Statistical Process Control & analysis	DOE, Curve-fitting
SolidWorks (CAD)	Rockwell statistical simulation (ARENA)
Dynamic and statistical modeling of systems	Matlab, LabView
Advanced Mechatronics	Controls systems and automation

Organizations

Phi Delta Theta fraternity –Recruitment committee, Social committee, New member educator
Texas Interdisciplinary Program - Academic organization at UT

Other Skills and Accomplishments

Microsoft Excel, Access, and office suite	University academic honors

Presidential Scholarship recipient, A. Odell Fletcher Scholarship, Frank McBee Jr. Scholarship