

Erica Swift

• Chattanooga, TN •

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Engineering graduate with four years technology experience seeking my next big growth opportunity at the TVA. I continuously strive to expand my involvement in research and design projects, particularly those that involve an understanding of electrical systems and programming. I will thrive in a team environment, eager to absorb industry knowledge and to contribute not only to the technical community, but to the broader Chattanooga area.

EXPERIENCE

Tennessee Valley Authority

October 2017 to Present

IT Software Engineer, Chattanooga TN

- Researched wireless data collection opportunities for fleet-wide predictive equipment maintenance monitoring
- Designed, built, and field tested prototypes involving electronic sensors, microprocessors, radios, batteries, and more
- Contributed code to custom firmware for wireless vibration and radiation sensors, as well as accompanying UI tools
- Implemented a low frequency mesh network at generation sites where signal penetration is key
- Influenced TVA's processes for testing and management of new Industrial IoT devices
- Exhibited new technology at the TVA's *Solutions Fair* and the *Nuclear Energy Assembly*
- Facilitated a major rollout of 300+ wireless sensors at all the TVA nuclear generation sites
- Supported improvements to our enterprise engineering data historian tool, *eDNA*
- Awarded the *Nuclear Energy Institute's Top Innovative Practice* trophy, 2018
- Promoted growth via *Women Empowered* and *Innovation Community of Practice* task groups
- Participated in service opportunities like *Day of Serving* and *Girls, Inc. Bookworm Club*

IT Customer Operations Engineer, Chattanooga TN

April 2014 to September 2017

- Supported design and improvements on TVA designed tools and applications
- Worked closely with Asset, Configuration, and Change Management teams to meet their needs
- Managed IT Store for internal hardware and software purchase orders using *Maximo*
- Procured and maintain inventories for employee software licenses
- Interfaced with TVA *HP* database systems and tools including *Asset Manager*, *Service Desk*, *Universal Configuration Management*
- Fulfilled IT service requests and projects interfacing with internal customers and supplier partners
- Acquired business acumen touring Sequoyah Nuclear Facility, Kingston Fossil Plant, and Chickamauga Dam

EDUCATION

The University of Tennessee at Chattanooga

December 2016

B.S.E. College of Engineering and Computer Science

- Computer Engineering concentration focusing on microelectronics hardware design and software programming
- Coursework including: Engineering Economy, Circuit Analysis, Computer Programming, Digital Electronics, Advanced Computer Systems, Control Systems Analysis, Computer Networks, Advanced Mathematics, and Applied Physics
- Promoted engineering student development on *Dean's Advisory Board*, 2015 & 2016
- CO.STARTERS 9-week seminar business tools geared for start-up entrepreneurs
- Awarded scholarships from UTC Provost's, Tennessee HOPE, and UAW Region 1268

SKILLS

Languages: C++, Python, R, Java, HTML, CSS, Excel Macro

Operating Systems: MacOS, Windows, and Linux

Software: MATLAB, PSPICE, Microsoft Office Suite, Slack, GitHub

Material Skills: MIG Welding, Electronics Soldering, FDM and SLS 3D Printing

Certifications: actively pursuing Engineer in Training (EIT) license

ASSOCIATIONS

Institute of Electrical and Electronics Engineers robotics team for hardware competition *SoutheastCon*, 2014 & 2015

Society of Women Engineers *Treasurer*, 2013-2015; *Collegiate Chapter Liaison*, 2016; *Professional Section Representative*, 2017-2018

American Society of Civil Engineers steel bridge and concrete canoe competition for *Southeast Conference*, 2014, 2015 & 2016

Delta Zeta Sorority philanthropy and leadership *Ritual Guard* and *Spirit Chair*, 2013 & 2014

CompUTC workshops including *TEDx Chattanooga* and *Scenic City Summit* events

Project Lead the Way Engineering, **FIRST LEGO League**, and **Girls, Inc.** elementary, middle, and high school outreach programs

ChaDev, **ChaTech**, and **Scenic City Summit** development in Chattanooga for technology professionals

"...the only way to do great work is to love what you do."

Steve Jobs