

# Jacob Armiger

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## EDUCATION

### Bachelor of Science in Computer Science, Minor in Business Administration

University of Tennessee, Knoxville

Expected Dec 2023

Dean's List GPA: 3.85/4.0

## WORK EXPERIENCE

### Knoxville Utilities Board

May 2022 – Present

Software Developer Intern

Developed web-based applications for internal employees and over 200,000 external customers.

- Contributed to KUB's web apps in **JavaScript** using the **Ember web framework** to add features and improvements that lead to a better customer experience.
- Made styling changes in **CSS** to align website design with Figma's provided by a third party.
- Implemented a new **content security policy** for KUB apps to provide greater security to all external customers.
- Utilized tools like **Splunk** and **Postman** to troubleshoot and resolve issues in a multi-layered system.
- Masked sensitive information in a **Java middleware** layer to provide greater confidentiality to all external customers.
- Collaborated in a **SCRUM** team to meet bi-weekly sprint goals.
- Attended a Business Education Series to gain a wholistic view of KUB operations and organization.

### University of North Carolina at Charlotte – William States Lee College of Engineering

Jun 2021 – Aug 2021

Research Assistant, Autonomous Robots and Systems Laboratory

Researched steering controller system identification and automation of low-cost water surface vessels.

- Programmed an Arduino microcontroller to read and log pulse-width-modulated (PWM) signals from a transceiver and parse regular expressions to gather data for system identification
- Assisted in installation of vehicle electronics and outdoor field testing of the autonomous surface vessel (ASV) in a local lake
- Refactored code into an object-oriented style to provide easier maintenance and readability
- Visualized data, designed experiments, and documented work to present research at an undergraduate symposium

### U.S. Army Special Operations – 75<sup>th</sup> Ranger Regiment

Jul 2015 – Oct 2019

Forward Observer

Provided support for the main assault force through air and artillery fire support or medical evacuation. Required efficient communication and coordination with aircraft in a dynamic environment while moving with the assault force.

- Attained a Secret Security Clearance
- Graduated Ranger Assessment and Selection Program
- Worked in a Team Leader position that required training and coaching of soldiers to fit the Ranger standard
- Gave upwards of forty classes and presentations to peers and senior supervisors that relayed technical information in an easy-to-understand way
- Worked in a Tactical Operations Center where working competently with the TOC team was key for successful fire support
- Frequently responsible for transportation of thousands of dollars' worth of equipment without any damage or losses

## INVOLVEMENT

### Engineers Without Borders, UTK Chapter

Sept 2020 – Dec 2021

Project Lead

This national organization solves problems for both its local community and abroad with multidisciplinary engineering projects.

- Networked with city government organizations and engineering firms to collaborate and complete projects.
- Directed team in the design and installation of a solar powered charging station installed at a local KATbus stop.

### Hack4Impact, UTK Chapter

Sept 2020 – Dec 2021

Developer

This national organization solves problems for non-profit companies via software solutions.

- Worked in a professional development environment that included a task pipeline, timeline, and version control with **Git**
- Completed front-end and back-end development tasks using **JavaScript**, **React**, and multiple **libraries**

## PERSONAL PROJECTS

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### comic-list-web-scraper

A web application that dynamically wrangles data from pages on comicbookreadingorders.com to provide users a method to track reading progress.

- **Adopted by site owner** and has over 300 unique visitors one month after release.
- Intelligently wrangled data from multiple web pages to be displayed in different file formats.
- Utilized **web scraping libraries** and built with **Python** and **Flask**.

### DevBlog

A blog for developers that gives them an easy platform to inform users of product updates.

- Backend systems built with **Django** and **Python**
- Frontend designed with **bootstrap4**
- Deployed with a **cloud platform** - Heroku

### react-portfolio-site

A website in **React** that presents my projects and community involvement.

## PROFESSIONAL SKILLSET

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### Languages:

C++, Java, Python, JavaScript, CSS, HTML, MatLab

### Technologies/Frameworks:

Git, Cloud Hosting, Docker, Jira, Splunk, Postman, Web Scraping, React, Ember, Django, Bootstrap