

# CALE WORKMAN

843-513-7391 | [CaleWorkman@gmail.com](mailto:CaleWorkman@gmail.com) | [www.caleworkman.com](http://www.caleworkman.com)

Computer engineer with 5+ years of python experience building automation tools and systems. Full-stack web developer with 2+ years of experience in ReactJS, Swift, HTML, and CSS. Experienced working in an Agile environment with object-oriented programming, test-driven development, and MVC design patterns.

## WORK EXPERIENCE

**R&D Engineer** 2019 - present  
Samtec

- Developed Python 3 tools to interface with Ansys electromagnetic design software and Keysight oscilloscopes/network analyzers.
- Created a Python tool to automate the PCB stackup design, validation, and documentation process, resulting in faster test board prototyping and more accurate documentation.
- Wrote Python scripts to manage the group Ansys materials database.
- Led the transition to a Git-based versioning system using VSTS.

*Technologies: Python, Git, PyCharm, VSTS*

**Software Developer** 2018  
Cognito Forms

- Managed Tier 3 customer support with Zendesk, debugging and root-causing software issues.
- Developed software features with C#/.NET using MVC design patterns.

*Technologies: C#, .NET, Azure, HTML, CSS, JavaScript, jQuery, JSON, VSCode, VSTS, Git, Trello, Zendesk*

**Electrical Validation Engineer** 2014 - 2018  
Intel

- Developed SI electrical validation methods for server microprocessors and DDR3/4 memory technologies.
- Created automation software with Python for hardware validation, data collection, and data processing.
- Performed data analysis using JMP and MATLAB scripting.

*Technologies: Python, MATLAB, JMP*

**Graduate Assistant** 2013 - 2015  
University of South Carolina

- Taught courses in Electromagnetics and project design.
- Named outstanding Teaching Assistant for 2013 and 2014.

## EDUCATION

**Ph.D. Computer Science** Expected 2024  
*University of South Carolina*

**M.E. Electrical Engineering, 3.650 GPA** 2016  
*University of South Carolina*

**B.S. Electrical Engineering, Magna Cum Laude** 2012  
*University of South Carolina*

## PORTFOLIO

### Barley

[www.barleyapp.co](http://www.barleyapp.co)

- Developed an iOS app for bar and restaurant inventory management currently available on the App store.
- Currently in use throughout NC

*Technologies: Swift, XCode, Python, CloudKit, JSON, RESTful API, iOS, Zeplin*

### In the Money App

[www.inthemoney.app](http://www.inthemoney.app)

- Developed a responsive single-page React app to plot profit-loss diagrams for stock option orders using real-time Yahoo finance data.
- AWS Amplify used for CI and API Gateway serving a RESTful API.

*Technologies: React, Jest, HTML, CSS, JavaScript, JSON, AWS (Amplify, API Gateway), Express, NodeJS*

### Personal Website

[www.caleworkman.com](http://www.caleworkman.com)

- Developed a responsive single-page React app to serve as a personal online portfolio and resume.

*Technologies: React, HTML, CSS, JavaScript, AWS, REST APIs*