

**Education** Missouri University of Science and Technology (S&T) December 2019  
Major: Information Science and Technology GPA: 3.84  
Minors: Business (AACSB Accredited), Enterprise Resource Planning

## Relevant Work Experience

### *Keysight Technologies Software Engineer Level II - August 2021 – September 2021*

- Worked on upgrading legacy customer-facing product from scratch
- Performed research to determine best technology stack for the project upgrade
- Applied technical competence and oral communication skills to interpret requests from product stakeholders to the development team
- Utilized written communication skills to document product feature requests from key stakeholders
- Planned, strategized, and implemented AWS solution for the US government from existing Keysight Product, involving cross-collaborating with team in Penang, Malaysia
- Used interpersonal skills to develop working relationships and effective communication patterns between multiple hierarchy levels and between employees from multiple countries including England, India, Malaysia, and Romania

### *Keysight Technologies Software Engineer - January 2020 – August 2021*

- Created full stack web django application to facilitate automation of communications across the entire Keysight company and ease internal customer service bottlenecks
- Used interpersonal skills to mentor and provide leadership for summer interns
- Wrote backend capabilities for the web application that tracks all of Keysight employee's computer hardware data and controls the ability to send automated, customized native client mailers and emails to employees needing to upgrade to a new device and return their existing one
- Wrote email functionality to automate communication regarding company computers
- Wrote the front end of a user facing portal for the tool using Bootstrap in which the employee can view their order status for new PC, their current standing in the lease agreement, and update their personal notification preferences
- Wrote backend capabilities to accurately populate the user facing portal with user specific data, preferences, and information pulling from a Postgresql database
- Visualized how employees interacted with the product my team wrote by aggregating data we collected from user interactions and creating interactive graphs integrated into the project's Django admin portal using Plotly, Pandas, and Python
- Utilized Cherwell's API to read and pull data into our asset management tool
- Automated running of functions based on desire schedule of server tasks to be performed using Celery
- Tested the web backend's URLs, Views, and Models by writing unit tests using Python's unittest and Django's testing libraries
- Utilized Docker for containerization of project
- Managed code versioning and collaboration through Bitbucket and Git
- Practiced Agile principles and worked as part of a SCRUM team
- Utilized written communication skills to document product feature requests from key stakeholders

### *Boeing iOS Software Developer Intern - May 2019 – August 2019*

- Created reusable framework iOS framework to authenticate users via AviationID saving Boeing iOS teams one month or more development time
- Wrote Python scripts using the Plotly library to enable sharing of analytic data with Boeing clients, while not sharing any Boeing proprietary data
- Developed an iOS application that models a 3D Boeing 737 Max airplane; split into different clickable components, allowing customers to click on a section of the plane to view passing and failing segments of the plane
- Managed devOps aspects of intern and current team Emerging Tech projects
- Use written communication skills to author multiple business case documents to obtain funding for team project ideas

***GoGetter Front-End Developer Intern*** - November 2018 – December 2018

- Used interpersonal skills to work closely with the CEO to provide advice on web development, and new pages
- Created new front end web pages using HTML, CSS, and Semantic UI framework
- Rewrote sections of the UI to improve user experience

***Boeing Software Developer & Business Analyst Intern*** - May 2018 – October 2018

- Developed multiple Portlets for the Supply Chain Information Portal web application that provided valuable information to Boeing's internal indirect supply chain team using C# and the .Net Framework
- Using database administration knowledge, wrote Microsoft SQL Server stored procedures to automatically email supply chain employees alerts
- Reworked UI for supplier contact information web app with HTML, CSS, and Bootstrap
- Increased information security of two existing web applications by eliminating cross-site scripting opportunities and SQL injection entry points

***Missouri S&T Center for ERP Research Assistant*** - November 2017 – February 2018

- Analyzed and predicted student academic success on personality assessment traits
- Cleansed and manipulated data using R and Rstudio
- Created a Data Warehouse with proprietary data in SAP HANA Studio
- Utilized clustering predictive methods in SAP Predictive Analytics
- Communicated research findings and interpreted results to professors

***KPMG IT Operations Intern*** June 2017 – August 2017

- Assisted in monthly reporting and quarterly forecasting of software and hardware assets
- Designed and implemented contract realization and optimization reports with Vendor Management
- Generated reports with Qlikview and Excel data visualization tools

## Other Work Experience

***High Sierra Mountaineering Porter and Trip Assistant*** March 2023 - Current

- Worked as a porter and trip assistant on guided mountaineering climbs on Mount Whitney and Matterhorn Peak for both International Mountain Guides and Sierra Mountaineering International
- Carried loads up to 80lbs in adverse weather conditions; sub-zero temperatures, high winds, low visibility, etcetera
- Set the bootpack for guides and clients en route to camps

***Yosemite National Park Ranger*** April 2022 – October 2022

- Performed trailwork to eliminate social trails and protect against erosion
- Patrolled trails providing guests with park information, assisting with trail directions,

- monitoring for medical issues, and interacting with children
- Performed interpretive duties to the public at Mariposa Grove
- Completed Search and Rescue Training and obtained status as SAR-T2 technician
- Successfully evacuated thousands of visitors and staff during the Washburn Fire in Mariposa Grove

## Projects

### *Climbing Data Analysis - Spring 2023*

- URL: <https://github.com/atfb10/Monthly-Climbing-Analysis-from-MP-Ticks>
- Created a data analysis tool using Python, SQLite database, Pandas, NumPy, and plotly. It performs the following:
  - Adding, listing, and removal of users to the project's database (CRUD)
  - Scraping of a user's recorded climbing history from mountainproject.com; a commonly used web application for climber's to gain information about climbs, and record completed climbs
  - Data engineering is performed on a user's extracted data to cleanse, manipulate, and handle missing values
  - Statistical findings are extracted and written to .txt file on a user by user basis
  - Generation of interactive graphs from user data to .html files on a user by user basis
  - Storing of each user's files to a zip file
  - Automated emailing of zip file with user's graphs and statistics too their personal email

### *Diabetes Prediction - Spring 2023*

- URL: [https://github.com/atfb10/Kaggle/tree/main/diabetes\\_prediction](https://github.com/atfb10/Kaggle/tree/main/diabetes_prediction)
- Utilized Machine Learning Algorithms to predict whether or not an individual had diabetes with 97% accuracy on a Diabetes data set provided on Kaggle
- Created, tested and compared multiple classifier models including random forests, support vector machines, AdaBoost, Gradient Boost, and more
- Visualized predictive features using seaborn and matplotlib

## Technical Competence

*Programming Languages:* Python, Python3, C#, C++, JavaScript, NodeJS, SQL, HTML, CSS, R

*Databases:* Postgresql, Oracle, SQL Server, MySQL

*Web Development Frameworks:* Django, Django REST Framework, Express, Bootstrap, Semantic UI

*Data Science/Analysis:* Pandas, NumPy, Scikit-Learn, Linear Regression, Logistic Regression, Supervised Machine Learning, Plotly, Seaborn, Matplotlib, Microsoft PowerBI, Microsoft Excel, SAP BusinessObjects

*Software Developer Tools:* Linux, Git, GitHub, Gitlab, Git Bash, Jupyter Notebook, VS Code, XCode, Visual Studio, RStudio, Jira, Bitbucket

*Other Tools:* Microsoft Office, Wordpress.com, SAP ECC 6.0, SAP HANA Studio

*Methodologies:* Agile, SAFe, Waterfall

**Honors and Activities:** Summa Cum Laude, 2 time Max C. Weiner Endowed Scholarship recipient, NCAA collegiate athlete (soccer)

**Certifications:** Certified SCRUM Developer: Issued by SCRUM Alliance, SAP Certificate of Excellence, Wilderness First Responder, CPR (Adult, Child, Infant), Avalanche 1, Epinephrine Auto Injector