Kelsy Andrea Vaughn
Full-Stack Software Engineer
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— Professional Experience —

Innovega Inc - San Diego, CA **Demo/Software Engineer, July 2021 to present**

- Develop programs to support AR/VR eyewear such as an image analysis application to recognize edges of lens wafers and cut for in house contact lens, utilizing Python and the OpenCV library.
- Build machine learning software to support the eyewear system which can recognize streets, signs, and objects for those who would utilize the eyewear to mitigate their low-vision.
- Generate content for marketing and viewer experience, including recording, editing, augmenting, and creating overlays for digital content to mimic user experience for demonstrations, this includes building out eyewear, developing content and applications for the eyewear, and setting up demonstrations for potential investors.

Forward Slope Inc. - San Diego, CA **Software Engineer, June 2020 to Aug 2021**

- Preformed UI development with modern web technologies such as Node.js, Angular, React, AND C++.
- Maintained system patches using SCAP and STIGViewer, on Firefox, Linux Red Hat and Tomcat.
- Regularly utilized VMware to operate and update software in controlled environment.
- Sustained cloud computing infrastructure utilizing AWS and Microsoft Azure.
- CompTIA Security+ Certification

United States Navy – San Diego, California **Electronics Technician, January 2014 to January 2020**

- Installed, programmed, maintained, and repaired electronic communications and radar systems.
- Repaired and reinstalled Linux software and reprogrammed system on the MLIU of CDLMS for RIMPAC.
- Restored ship to full operational capacity by diagnosing and mending IP service issues due to an installation error of an Navy Multiband Terminal antenna which provided 25-50% of the ship's IP services.
- Programmed Harris radios and performed maintenance on PRC-152, PRC-150, PRC-117G, and BGAN.

Unitrans-ASUCD – Davis, California **Mechanic, August 2009 to December 2011**

- Implemented new GPS tracking, external and internal communications systems on a fleet replacement of 24 buses within three months. Completed installation for a variety of electrical and communications systems.

— Open Source Contributions —

Operation Code React-Native Free Code Camp

— Technical Skills—

Languages & Frameworks: Javascript, React, Node, Python, OpenCV, C++, C#, CSS, HTML, Jquery/Ajax

Platforms & Services: Docker, AWS, VXWorks, Git, VMWare

Databases: PostrgeSQL, CassandraD, mySQL, MongoDB

— Educational Background—

Colorado State University	Master of Science, Artificial Intelligence and Machine Learning	December 2022
Southern New Hampshire University	Master of Arts, English, Manchester, NH	June 2021
Hack Reactor	Advanced Software Engineering Immersive, San Francisco, CA	May 2020
University of California	Bachelor of Arts, Anthropology, Davis, CA	December 2011

— Personal Projects —

Track Hiit | *A full-stack workout-tracking mobile application (uses: React-Native, Express, MongoDB*)

- Built a user friendly workout tracking application with React-Native that allows users to input routines and use those to track workouts, weights, heart rate, and length of workout in an intuitive manner.

Sidebar Music App | *Built a full-stack photo services and review application (React, Node, MongoDB, AWS/S3, Docker*)

- Built a multi-service full stack application with React, Javascript, CSS Modules, Express, and a MongoDB that would display reviews, photos, menus, prices, and local information for restaurants.
- Developed a RESTful API using AGILE practices to deploy a micro service utilizing AWS S3 and EC2, that would incorporate multiple separate projects into a single one page view application.

Photo and Review App | Built an optimized database for web services (*Postgres, CassandraDB, Node/Express, AWS/EC2, Docke*r, *K6, New Relic,* loader.io*, NGINX*)

- Built the backend of a music share, comment, and play application that promoted similar playlists, allowed users to generate new playlists with current songs, upload songs,, and display related information from within a Postgres database built out to support high traffic , over 1000 requests per second and tested using New Relic, loader.io, and K6.
- Optimized the database to support 2000+ user requests per second once deployed on an EC2 t2.micro instance, using clustering, partitioning, indexing, and horizontally scaling the servers with NGINX.