| **Kyle Glover**  South San Francisco, CA 94080 | **LinkedIn:** <https://www.linkedin.com/in/kyle-glover-17041982/>  **Website:** <https://kyle-glover.com/>  **GitHub:** <https://github.com/KyleJGlover>  **Email:** [kjglover4585@gmail.com](mailto:kjglover4585@gmail.com)  **Phone:** (707) 474-7423 |
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**Skills:**

* Proficient in: C#, C++, C, Java, Swift, Python, JavaScript, HTML, CSS
* Frameworks/Libraries: OpenCV, Flask, React, Node.js, SQLAlchemy, Marshmallow
* Database: MySQL, PostgreSQL, MongoDB
* Tools: AWS, BitBucket, SourceTree, Git

**Experience:**

***Software Engineer***

Halo Labs (Optofluidics, Inc.) **December 2021-August 2023**

Millbrae, California

* Designed and deployed full-stack multi-threaded applications in C# for managing and overseeing automated systems within manufacturing contexts, enhancing operational efficiency and control.
* Utilized C++ and OpenCV to develop features aimed at enhancing data quality by analyzing pixel saturation in monochromatic images, applicable for optimizing image processing.
* Revamped the UI of ParticleVue to accommodate a substantial 350% surge in data output, necessitating a comprehensive redesign of reporting data and user interfaces.
* Debugged and enhanced firmware with C language and Simplicity Studio, introducing new features like I2C capabilities and addressing legacy software issues.
* Established infrastructure for embedded devices in new mechanical designs, leveraging C++ to boost instrument efficiency by 350%.
* Mentored and assisted intern projects while completing daily duties.

***Clinical Laboratory Associate I-II***

Color Health **August 2020-August 2021**

Burlingame, California

* Perform specimen receipt, accessioning, and sample transfer using laboratory automation.
* Assist in routine laboratory maintenance, including equipment maintenance, maintaining lab cleanliness and a safe laboratory environment.
* Restock laboratory inventory and perform space maintenance as required.
* Assist licensed personnel, under direct and constant supervision, with routine clinical testing (including reagent preparation and nucleic acid extraction), equipment and reagent validation, and other laboratory activities.
* Follow laboratory’s established policies and procedures.
* Document all corrective actions taken when there is a deviation to the test system.

***Quality Control Technician***

The Janssen Pharmaceutical Companies of Johnson & Johnson **August 2019-August 2020**

Vacaville, California

* In a team setting and cGMP environment, perform routine analytical testing or microbial testing in support of raw materials, lot clearance, stability studies, and analytical request testing.
* Prepare and standardize test / volumetric solutions, standard solutions, and samples for various chemical and physical tests according to approved methods. Perform routine analyses including, but not limited to HPLC, GC, UV Spectrophotometry, FTIR, NIR and Karl Fischer.
* Prepare data and documentation using calculators and computer software. Peer review, evaluate and investigate results from various analyses with guidance from Supervisor or designee. Prepare, organize and final review paperwork for lot release to ensure accuracy and completeness. Provide information related to laboratory investigations, and assist as necessary.
* Contribute to special projects such as laboratory equipment validation, analytical method transfers, process improvements, and document change orders. Assist and train others in simple laboratory functions, at peer level or below. Properly dispose of sample preparations and solutions according to safety and environmental procedures

**Education:**

* National University, La Jolla **July** **2021**

*Master of Science in Computer Science, MSc*.

* University of California, Santa Cruz **June** **2018**

*Biology, BA*

**Personal Projects:**

[**Bioinformatics Project**](https://github.com/KyleJGlover/Bioinformatic-Projects)**:** *Python, Biopython*

As a software engineer passionate about bioinformatics, I've undertaken personal projects exploring Biopython, database retrieval, data intake for diverse bio formats, and machine learning with random forests. These projects reflect my commitment to unraveling biological complexities through computational tools. With Biopython, I've mastered parsing and analyzing biological data, while database retrieval techniques have enabled seamless access to extensive biological repositories. Leveraging machine learning, particularly random forests, I've uncovered hidden patterns within biological datasets, facilitating informed predictions and decisions. Furthermore, my projects in phylogenetic and sequence analysis, along with structural bioinformatics, have deepened my understanding of evolutionary processes and molecular interactions. Each endeavor fuels my passion for integrating software engineering with biological research, driving me to push the boundaries of innovation in this dynamic field.

[**Plantings**](https://github.com/KyleJGlover/plantings_production/tree/Master)**:** *JavaScript, Next.js, React.js, Express.js, Kubernetes, Docker, Nginx-Ingress, Nats-Streaming,*

*MongoDB, Skaffold, Bootstrap*

A simple e-commerce site that was developed using a microservice architecture. On the site a user can sign up, sign in, and post any kind of plant for sale. The website supports a payment service run by the Stripe API. This website is running on a Kubernetes cluster with pods built using Docker containers and is hosted by digital ocean. To assist and develop the Kubernetes Cluster I used Skaffold framework to maintain the workflow for building, pushing, and deploying my application. The front-end was created using React.js and Bootstrap frameworks. The web pages support server-side rendering with Next.js to serve pages to users. To account for downed services I implemented a publisher/subscriber service with Nats-Streaming to retain data for concurrency between services. This repository is connected to my account on digital ocean and will initiate an action whenever there is push/merge to the Master repository using GitHub actions. This application shows my ability to pick up complex tools and use them quickly.

[**BlogIt**](https://github.com/KyleJGlover/BlogIt)**:** *C#, ASP.NET Core MVC, HTML, CSS, HTML, JavaScript, MySQL*

The ASP.NET Core MVC blogging project incorporates Microsoft Identity for robust authentication, ensuring secure user registration and login processes. Leveraging Microsoft Identity’s built-in features such as password hashing and token-based authentication, the project fortifies its security posture and aligns seamlessly with ASP.NET Core’s ecosystem. Additionally, the platform enriches user engagement with the integration of liking and commenting functionalities. Users can express appreciation through a user-friendly liking feature, and a robust commenting system encourages interactive discourse. These enhancements, coupled with a modular and scalable ASP.NET Core MVC architecture, create a secure, user-friendly, and dynamic environment for bloggers and readers alike.

[**Coffee Break**](https://github.com/KyleJGlover/Coffee_Break/tree/Master)**:** *iOS, Swift UI, Python, Express.js, Node.js, SQLAlchemy, MySQL, Flask*

In a collaborative project, my team and I developed an iOS application GUI using Swift UI, integrated with a Restful Web API built in Python using the Flask framework, and utilized the Object-Relational Mapper SQLAlchemy to interact with a MySQL database for data storage. The application allows users to create and manage their custom Coffee drinks and facilitates group orders for coffee drinks. We meticulously documented our project, creating comprehensive documentation including the OCD, SRS, STP, SDD, and User Manual, ensuring clarity and coherence throughout the development process. Through our combined efforts, we successfully delivered a user-friendly and efficient solution that met the needs of our stakeholders.

[**Company Dashboard**](https://github.com/KyleJGlover/CompanyDashboard)**:** *Python, Django, JavaScript, HTML, CSS, Postgres*

An admin dashboard web application using the Django Framework with authentication. On the site a user can make customer accounts that can receive orders from a list of products. These orders can be in multiple states of delivery (ex. pending, out for delivery, Delivered). These orders can be filtered through on multiple criteria such as date created, product name, status. You can view user information and update this information at any time. This dashboard uses the Django Framework to combine the tools used in python with HTML for the front end. The styling for the web page used Bootstrap/CSS. The dashboard is supported by various API’s written using Django standards of REST. Storage is handled on AWS RDS instance for Postgres. For image storage I used an Amazon S3 instance.