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| **Chien-Cheng Aaron Lai**  (786)817-7745 | aaronlai1027@gmail.com | [linkedin.com/in/aaronchienchenglai](http://linkedin.com/in/aaronchienchenglai) | [github.com/aaronlai1027](http://github.com/aaronlai1027) (willing to relocate) | | | |
| **EDUCATION** | | | |
| **Georgia Institute of Technology, GA**  Master of Computer Science  **Rice University, TX**  Master of Chemical and Biomolecular Engineering  **National Cheng Kung University, Taiwan**  Bachelor of Chemical Engineering | | **Expected Aug 2022**  GPA: 4.00/4.00  **Graduated Dec 2018**  GPA: 3.46/4.00  **Graduated Jun 2015** | |
| **SKILLS** | | | |
| **Programming & Language** | Python, C/C++, Java, JavaScript, MySQL, JSON, R, MATLAB, HTML5/CSS | | |
| **Framwirk & Tools** | Git, Docker, Flask, NodeJS, React, Redux, Stripe, GCP | | |
| **PROJECTS** | | | |
| **Email Survey Website** | | | **Oct 2021 - Nov 2021** | |
| * Developed a web that user can send bunch emails to collect feedbacks using **NodeJS** with **React** and **Redux**. * Developed backend to handle tabulation feedbacks using **Express** and **MongoDB.** * Implement website payment using **Stripe** and user sign-up with **Google OAuth.** | | | | | |  |
| **Job Offer Comparison Application** | | | **Aug 2021 - Nov 2021** | |
| * Designed the application flow and defined all APIs by **UML**. * Developed backend logics to processed user data and product information using **Java**. * Designed and integrated UI frontend interface (GUI) using **Android Studio**. | | | | | |  |
| **Multi-Threaded gRPC and Distributed File Systems (DFS)** | | | **May 2021 - Jul 2021** | |
| * Designed and implemented a distributed file system using **C++** **gRPC** and **Protocol Buffer**. | | | |
| * Implemented multiple threads to manage gRPC asynchronous callbacks and requests. | | | | | |  |
| **Shared Memory-Based Inter-Process Communication (IPC)** | | | **May 2021 - Jul 2021** | |
| * Implemented a cache server to communicate with a proxy server by **POSIX share memory API**. * Utilized semaphores for file transfer and message queues for server communication. | | | |
| **Sales Report System Web Service** | | | **Jan 2021 - May 2021** | |
| * Designed the database schema by the **EER-Relational** Mapping and implement it with **MySQL** * Developed backend logics to process data from database using **python Flask**. * Created frontend interface to visualize analytical reports with **HTML/CSS** and **Bootstrap**. | | | |
| **SuppliesMapForCov19** | | | **Mar 2019** | |
| * Developed a map website that users can offer and request supplies on Google Map using Flask, HTML/CSS/JS, Google Map JavaScript API, GCP Firestore, GCP App Engine. | | | |
| **Computer Vision** | | | **Jan 2018 - May 2018** | |
| * Built **SIFT** and **SURF** detecting features algorithm to matching visual objects for image transformation and deformation using **MATLAB**. | | | |
| **WORK EXPERIENCE** | | | |
| **Formosa Plastics Corp., Testengeer, Inc.**  Chemical Engineer | | | **Mar 2019 - Present** | |
| * Developed functions to control instrument testing bias and variance for XRD, FIIR, DSC, HPLC. * Developed functions to re-login the samples with multiple duplicate information and save 50% re-login time. * Visualized and analyzed testing data in Total Quality Management Systems database using **NumPy** and **Pandas**. | | | |
| **Applied Optoelectronics, Inc.**  Engineering Intern | | | **Jun 2018 – Aug 2018** | |
| * Developed functions to track product process, testing data, and instrument information by Microsoft SQL Server. * Developed functions to analyzed testing results of failure devices and overdue work orders. | | | |