

TONY TSAI

Software Engineer | Portfolio | LinkedIn | | GitHub | k667621@gmail.com | 979-888-3420 | San Francisco, CA

EDUCATION

MSc in Computer Engineering | Texas A&M University | 4.0 GPA

USA, Jan 2020 - Nov 2021

- Machine Learning, Artificial Intelligence, SQL for Data Analysis, Web Development, Distributed System & Cloud Computing

BSc in Chemical Engineering | National Cheng Kung University

Taiwan, Sep 2010 - Jul 2014

- Introduction of Computer Science, Data Structure, Analysis of Algorithms, Object Oriented Design(OOD)

SKILLS

- Programming: Python, Java, JavaScript, C#, C++, Kotlin, Scala, Golang, HTML, CSS
- Frameworks: **FrontEnd:** React.js, Vue.js **BackEnd:** Django, Flask, Node.js, Spring, Ruby on Rails
- Database: **SQL:** MySQL, PostgreSQL **NoSQL:** MongoDB, Redis, Memcached
- Tool: **Testing:** Jenkins, PyTest, GitLab, Travis CI **Others:** Docker, Selenium, Linux, LaTeX

EXPERIENCE

UMC, Software Engineer - Processing

Taiwan, Aug 2016 – Nov 2019

Python, Django, PostgreSQL

- Developed an auto wafer dispatch system by using **Python** with 20+ users that shaped core features based on user behavioral patterns; increased user-task efficiency by 50%
- Collaborated with the engineering team to create a web app by **Django** and design a visualization feature to help users make informed and efficient decisions to improve product's yield rate
- Used **Oracle database system** to store all the exposure equipment's log information and create an analysis tool to identify the best process parameters in order to enhance process window in lithography module
- Fine-tuned **SEM** image recognition system to auto detect defects on the wafers; decrease miss operation rate by 30%

PROJECT

Tracking System, Team Project - [GitHub](#)

Feb 2020 – May 2020

Python, Django, MySQL

- Developed a tracking system for CS department staff members to record students' profiles via **Django**
- Adapted **Agile** development style and successfully achieved all the customer requirements
- Deployed a production web on **Google App Engine** in conjunction with **MySQL** in **Ubuntu** environment
- Implemented Cloud Drive, CSV Parser, and **User Authentication** based on customer feedback

Face Recognition App, Personal Project - [GitHub](#)

Feb 2020 – Jun 2020

Node.js, React.js, PostgreSQL

- Applied **Clarifai** face detection API to locate the human faces of an image link uploaded by users
- Completed the frontend with **React.js** to display an interactive UI in reusable components manner
- Employed **Express.js** and **PostgreSQL** to serve the backend and followed **RESTful API** design pattern

Mails Sending App, Personal Project - [GitHub](#)

May 2020 – Aug 2020

Node.js, React.js, MongoDB

- Built an auto mail web app integrated **Google OAuth2.0** login API and **Stripe** credit payment system
- Used Passport.js & MongoDB to set an OAuth login system and get login status via **cookie-session**
- Linked up **SendGrid** service and collected recipient feedback via WebHook mail click bottom
- Applied **Redux** package to simplify frontend web app's state management system

GitHub Social App, Personal Project - [GitHub](#)

Aug 2020 – Sep 2020

Node.js, React.js, MongoDB

- Created a Full Stack social platform for developers to interact with other's GitHub profiles
- Applied asynchronous programming to fetch information from GitHub API by using GitHub access token
- Built a back-end server through **Node.js** and connected it to **MongoDB** to store user's personal profiles
- At the front-end, utilized **React Hooks** to manage function component's states