

# TONY TSAI

Software Engineer | [Portfolio](#) | [Linkedin](#) | [GitHub](#) | [k667621@gmail.com](mailto: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  
Tools: **Testing:** Jenkins, PyTest, GitLab **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