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
- Tools: **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**%**

Skyworks Solutions, Software Engineer - Co-Op   Cedar Rapids, Iowa, Jan 2021 – Jul 2021
Python, Django, PostgreSQL, Unix
- Developed a parameter file generator by using **Python** with 20+ users that help analog designers to develop 5G front-end module products more easily; increased user-task efficiency by 60**%**
- Used PyQt/PySide to create GUI for designers to input basic script commands in order to get their electronic components' information on the register map file and reduce the amount of manual search by designers to avoid miss operations
- Created a web app to integrate with different front-end module team's tool kits by applying **Django** and **PostgreSQL**

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