CHIH CHIN TSAI

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EDUCATION

Texas A&M University , College Station, Texas, USA   Jan. 2022

M.S. in Computer Engineering. GPA: **4.0/4.0**

National Cheng Kung University, Tainan, Taiwan   June 2014

B.S. in Chemical Engineering. GPA: **3.5/4.0**

SKILLS

- Programming Languages: Python, Java, JavaScript, Node.js, CSS, HTML5
- Tools: Django, Express, jQuery, React.js & Redux, MySQL, PostgreSQL, MongoDB, Ubuntu

PROJECTS

Student's Profile Tracking System Project - Texas A&M   Feb. 2020 – May. 2020

*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 **within 3 months**
- 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
- URL: `https://lateral-insight-272819.appspot.com`

Full Stack Facial Recognition App   Feb. 2020 – June. 2020

*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
- Deployed the project on Heroku URL: `https://smart-brain3344.herokuapp.com`

Full Stack Mailing Web App - (React.js + Node.js)   May. 2020 – Aug. 2020

*Built a sending mail web app integrated **Google OAuth2.0** login API and **Stripe** credit based payment system*

- Used **Passport.js** & **MongoDB** to set a Oauth login system and memorized login status via **cookie-session**
- Linked up **SendGrid** service to send mails and collected recipient feedback via WebHook mail click bottom
- Applied **Redux** package to simplify front-end web app's state management system
- URL: `https://agile-castle-89662.herokuapp.com`

Full Stack GitHub Repo Networking Platform   Aug. 2020 – Sep. 2020

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
- URL: `https://polar-depths-16631.herokuapp.com`

WORK EXPERIENCE

UMC inc. Hsinchu, Taiwan   Aug. 2016 – Nov. 2019

Process Engineer   Full time

- Tuned up a validate software to detect weak patterns from reticle's layout. Expected to improve the yield loss from **5 % to be less than 1 %** and set up a new rule for reticle layout design
- Developed Cu/Al process flows and improved **yield rate** of Microelectromechanical system (MEMS) product to **98 %**. Used correlation tools to analyze charts like scatter plot, histogram to inspect product's quality