# MICHAEL CHEN

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#### EDUCATION

#### Raffles Junior College

Jan 2020 - Present

Singapore

#### SKILLS

Frontend: Javascript, ReactJS, Hooks & Context API, NextJS, Redux Backend: Python, Django & DRF, Celery, PostgreSQL & Redis Data Science: Scikit-learn, Statsmodels, NLTK, Keras, Pandas

#### EXPERIENCE

## New Jersey Institute of Technology

Research Intern

Nov 2020 - Present

- Studied the impact of a deep learning counter-ad-blocking strategy on user engagement, using a Forbes dataset containing 40K unique ad-blocking users
- Working on extending the conference paper "To be Touch or Soft: Measuring the Impact of Counter-Ad-Blocking Strategies on User Engagement" into a journal paper

# AI Singapore

Machine Learning Engineer Intern

Jun 2020 - Jan 2020

- Implemented Monte Carlo simulations on historical transactions data of F&B establishments to predict how potential changes to food menu would affect revenue
- Built MenuCarlo, a web app for visualizing restaurants' historical transactions and recommending menu optimizations to enable revenue growth, using a React and Django
- Collaborated with Temasek Polytechnic and various F&B establishments

#### **Psion Insights**

Data & ML Engineer Intern

Sept 2020 - Jan 2020

- Offered to extend internship to work on Psion Insight's new product: Psion Advisor
- Implemented a web scraper as an AWS Lambda function which pulls data from various RSS feeds and saves them on AWS ElasticSearch
- Deployed a Logit classification model and TF-IDF content recommender system into production using AWS Lambda

## **Psion Insights**

Data Science Intern

July 2020 - Sept 2020

- Built risk classification model with Keras CNN to categorize existing risks into relevant types, thus saving the time of risk managers by automating their workflow
- Implemented fuzzy matching algorithm using NLP-based KNN models to recommend controls for newly-added company risks, allowing risk management teams to make more accurate decisions

# Projects

FastDash ReactJS & Redux, Django & DRF, PostgreSQL, AWS S3

https://git.io/JI3Gb

Inspired by Excel PivotCharts, FastDash is a web app for building dashboards, designed for rapid visualization and easy sharing.

#### **SEAT Web App** Django, Scikit-learn KNN, Bokeh, NLTK

https://git.io/JUP5M

A sentiment analysis web app which aims to democratize sentiment analysis for non-technical users. Its feature set includes (i) Twitter API integration, (ii) filtering and classification using fuzzy matching, and (iii) pre-trained sentiment analysis models.

## CERTIFICATIONS

#### CS50W: CS50's Web Programming with Python and JavaScript

HarvardX

Learnt the basics of Django and vanilla Javascript. Built FastDash as my CS50W final project.

#### Microsoft Data Science Professional Programme

Microsoft

Completed a total of 6 courses: Essential Math for Machine Learning, Principles of Machine Learning, Querying Data with Transact-SQL, amongst others.