

Matthew Wong

Software Engineer with Interests in ML,
Big Data, Frontend and Full-Time

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BACKGROUND

Languages: Python • C/C++ (learning) • ReactJS/React-Native (learning) • Flutter (learning)

Technologies: Cloud(AWS) • Web(Flask/FastAPI) • Database(SQL/pandas) • ML(SkLearn/Tensorflow) • API

WORK EXPERIENCE

Daedalus Enrichment Programs - Coaching and Teaching Staff

Robotics Coach

Vancouver, BC
July 2017 – Present

- Collaborate with other instructors to enhance curriculum, implement weekly schedules to improve efficiency
- Coordinating teams of 5-10 people to program, design and problem solve

PROJECTS AND SELECT COMPETITIONS

Diversify | Social Media App | BCHacks - Best Diversity in Tech

Python, ReactJS, Flask, Sklearn, Pandas, Numpy, ReactJS

Remote
February 2022

- Diversity is a mobile app that connects hiring managers to minority groups to promote diversity in the workplace
- Lead the design, training, and deployment of a TF-IDF recommendation system with 84% accuracy
- Helped to design the web app's UI in ReactJS

Daily COVID Prediction Model | Predictive Model | HackTheValley5 - DCP Challenge #2 - 1st Place

Python, Pandas, Seaborn, Matplotlib, Sci-kit-learn, fbprophet

Vancouver, BC
October 2021

- Designed a model with a 1.88 MSE using an LSTM CNN model in conjunction with Prophet
- Normalized data and visualized trends in daily cases using preprocessing and data exploration techniques

TellMe | Sign Language Interpreter & Object Identifier | ECS - 1st place Overall

Python, OpenCV, Flask, Tensorflow, Figma

Remote
March 2022

- SignTube is a web app designed to bridge the gap between the deaf/mute community and the public by making sign language easily readable; TellMe transcribes sign-to-text and identifies objects using computer vision
- Transcribes and identifies with 88% accuracy using OpenCV and Tensorflow
- Deployed the transcription model using Flask and designed the mobile app in Figma

AdventureAddict | Social Media App | HackUMBC - 2nd Overall

Python, SkLearn, Pandas, Numpy, Plotly

Remote
November 2021

- Mobile social media app that recommends posts and stories utilizing machine learning
- Gives recommendations with a 78% accuracy by applying a TF-IDF and KNN recommendation system
- Preprocessed data and added date, rating and category features utilizing Plotly, Numpy and Pandas
- Assisted in mobile deployment with Flutter

Lecture Leverager | Speech To Text App | FallHacks - 1st place Overall

Python, AssemblyAi, ReactJS, Heroku, FastAPI, Flutter

Surrey, BC
November 2021

- Lecture Leverager is a web and mobile app to help students take notes using live audio or uploaded video/audio
- Transcribes with 98% accuracy using AssemblyAi and summarizes with 86% accuracy using LexRank algorithm
- Spearheaded implementing and deploying AssemblyAi for transcription and the summarization algorithm
- Assisted in designing the web and mobile app in ReactJS and flutter

YouKraime | Humanitarian Aid Relief App | YHacks - Audience Favourite

Python, SkLearn, Pandas, Numpy, Plotly, ReactJS, GoogleMaps API

Remote
April 2021

- Mobile app that connects refugees fleeing Ukraine with people and organizations that provide humanitarian relief in and around Ukraine using a matching system and map
- Developed, designed, and trained a TF-IDF recommendation system with 81% accuracy
- Handled the implementation of GoogleMaps API
- Supported other developers in mobile development using the MERN stack

AvaAssist | Smart Banking Support App | HackWestern - Honorable Mention & Runner up

Python, SkLearn, Pandas, Numpy, Plotly, Figma, Flask, DashaScript, ReactJS, React-Native, Twilio

Remote
November 2021

- Mobile banking chatbot app that predicts loan eligibility, provides personalized financial advice, email using Twilio
- Combined datasets, preprocessed data and engineered features utilizing Plotly, Numpy and Pandas
- Assisted in constructing the mobile app in ReactJS and React-Native
- Predicts loan eligibility with a 92% accuracy using a RandomForests predictive model
- Deployed the prediction model using REST APIs

EDUCATION

Simon Fraser University

Burnaby, BC

- Bachelor of Applied Science in Computer Science

Lighthouse Labs

Vancouver, BC
August 2021

- Certification in Data Science