Matthew Chen

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Houston, Texas (Open to relocation)
Portfolio Website: https://matthewtchen.com
github | linkedin

EDUCATION

Bachelor of Science - Computer Science   **August 2018 - May 2022**

*Texas A&M University - Engineering Honors and National Merit Scholar, **GPA: 3.5/4.0***   *College Station, TX*

SKILLS

Programming Languages	Javascript | Python | Java | C++ | Typescript | Terraform | HTML/CSS
Technologies	React | Redux | Vue | Node | Express | Bootstrap | SASS | Webpack/Vite | Next.js
	AWS | Docker | Git | RESTful APIs | Babel | Django | SEO | Jest | Mocha | HTTP | Stripe

EXPERIENCE

Aspen Technologies   **June 2023 - Present**

Software Engineer, Dataworks Visualization Team   *Houston, TX*

- Utilized React, Redux, Typescript, Node, Bootstrap, and Perforce to build new component UIs and help modernize and rewrite legacy front-end frameworks and technologies
- Provided React.js-related guidance for other team members
- Fixed Vue.js and Typescript bugs in a Web-Based Graphics App
- Performed software testing with Nightwatch.js

IBM   **August 2022 - June 2023**

Software Developer, Cloud Engineering Team   *Austin, TX*

- Used React, Javascript, Mocha, Carbon, and Git to build, maintain, test, and debug UI components of an IBM Cloud infrastructure-as-code automation project
- Configured and provisioned Cloud Computing environments using Terraform and HCL
- Performed Acceptance Testing with internal tool TFXJS
- Open-sourced the custom React UI components developed for the project to IBM's public GitHub
- **Project successfully reduced client onboarding time from 7 weeks down to 1-2 weeks**
- Served as *Team Lead* and *Scrum Master* for Incident Accuracy Reporting System project, team implemented audio comparison algorithm in Python (spectrogram audio hash comparison) for IBM New Developer Jumpstart Program
- In weekly client meetings, provided solutions to multiple Fortune 500 clients on their requests with various IBM Cloud technologies, including Cloud Automation with Terraform, Schematics and Blueprints, Red Hat Openshift

IBM   **May 2021 - August 2021**

Software Developer Intern, Space Tech Team   *Austin, TX (remote)*

- Used Python and Tensorflow to initiate and implement IBM Space Tech's PlasticNet - an open-source deep learning object detection machine learning project dedicated to detecting and identifying different types of plastic/trash in the ocean on real-time video, and images
- Built a PlasticNet machine learning pipeline (accessible through CLI) that can be easily used to train and test object detection models
- Using Darknet YOLOv4 and Tensorflow architectures, continuously trained and tested new PlasticNet object detection models using transfer learning via pretrained models such as Faster-RCNN
- Open-sourced project to the public for further development, https://github.com/IBM/PlasticNet

SIDE PROJECTS

SapphireByTheSeaTX.com   **July 2023 - February 2024**

Full Stack Developer   *Houston, TX*

- Built an full-stack direct booking site for a short-term rental property. Allows guests to perform secure payments and bookings and also send inquiries to the landlord.
- Front and back-end development using React and Express (Node.js), respectively. Utilized Stripe API for Payment and ID Verification, Pricelabs API for price data
- Used Netlify and Render for hosting: https://sapphirebytheseatx.com/

Airbnb Search and Scraper   **February 2023 - June 2023**

Full Stack Developer   *Houston, TX*

- Created a program in Python which will run Airbnb searches to find specific listings, then scrape data about these listings and output them to a CSV file

PUBLICATIONS

- Matthew Chen, "PlasticNet: Saving the Ocean with Machine Learning," *IBM Cloud Blog*, Austin, TX, USA.