

KRYSTAL MA

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Professional Experience

Software Engineer Jan 2024 – Jul 2024

Oakscholar LLC - Education + AI Startup

- Used Amazon Web Services to create a full-stack application, deploy and manage web app in the cloud using Amazon Lightsail, set up domain and DNS routing with Amazon Route 53
- Owned the front-end development using HTML, CSS, JavaScript jQuery, Bootstrap and Tailwind CSS. Raised accepted suggestions on UI features to enhance user experience
- Lead team to develop backend, using Django framework, Python and SQLite. Effectively refactored faculty code in order to optimize website which serves 200+ seed customers
- Collaborated across teams to organize products development, led development team in agile development using Jira for task tracking and assignment
- Successfully improved team efficiency by promoting use of Git for version control, use of Docker, streamlined development processes and use of AWS ensured seamless deployment

Software Engineer Apr 2020 – Nov 2020

Goopter Holdings Ltd. - Startup

- Maintained and optimized the codebase, debugged and resolved 20+ RESTful API issues using Postman and Chrome DevTools, optimizing 500+ businesses' user experience
- Designed, delivered and tested UI features using Ant Design and Bootstrap; optimized UI interfaces, provided smoother user flow, resulting in reduced negative feedback by 20%
- Designed and implemented business-end web applications, driving monthly revenue of 100K using JavaScript, Node, React, Redux, Express and Git etc.

QA Analyst Intern Jan 2020 – Apr 2020

Goopter Holdings Ltd. - Startup

- Developed and executed a targeted test plan for product release, which identified and resolved 75% of potential issues before launch, ensuring successful deployment
- Built and maintained testing framework, prepared test data, leading to improved quality and reliability of the application
- Initiated a cross-departmental feedback loop for the QA process, which led to a 50% faster response and resolution of user-reported issues, significantly boosting customer satisfaction

Technical Projects

Backend REST API | Build backend REST API with Python and Django

- Implement a fully functioning recipe REST API with Django REST Framework, that handles user authentication, creating, uploading, filtering and searching objects, etc.
- Set up a local development server with Docker and Docker-compose; configure GitHub Actions to automatically run unit tests; configure a Postgres database
- Apply best practice principles including Test Driven Development; configure Travis-CI to automate code checks; write unit tests using Django Test Framework

Hotel Booking | Full Stack App with Next.js & TypeScript, CI/CD with Jenkins & Docker

- Build a full React stack application in NextJS, implement authentication with next-auth, integrate payment gateway and Cloudinary, third-party image hosting server, deploy on Vercel
- Implement CI/CD pipeline using Jenkins & Docker, automate build, test and deployment jobs

Server-less REST API | Build Server-less REST API using the Server-less Framework

- Create the backend DynamoDB table, set up the CI/CI pipeline for deployment automation, write Lambda Handlers and deploy the REST API to the AWS Cloud

Distributed Systems | Distributed File Storage in Go

- Build a decentralized, fully distributed content-addressable file storage system using Go that can handle and stream very large files

Skills

Front-end: Javascript(ES6) | HTML5 | CSS3 | Tailwind CSS | Bootstrap | Ant Design

Skills: Java | Python | Django | React | Redux | Express | NodeJS | TypeScript | NextJS | MongoDB | MySQL

Tools: Git | Bash | VS Code | Postman | jQuery | Chrome DevTools | Jenkins | Docker | Jira

Methodologies: Agile Development | Scrum | Test Driven Development (TDD)

Education

Master in Statistics

The George Washington University - Washington, D.C.

Bachelor in Mathematics with Statistics

University of Bristol - Bristol, UK