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KARAN PATEL

3A Computer Science | Software Developer

WORK EXPERIENCE

Software Developer Intern | Cambridge Global Payments

- Was an integral part of the *Agile Scrum* team working on the frontend aspects of web application using *React* and *Redux*, as well as with *SQL databases*.
- Investigated and fixed multiple bugs, developed deliverable features, and created white-box *Unit Tests*.
- Helped the QA team with *Regression and Performance testing*, increasing the team's work productivity by about **150%**.

Product Support Intern | Cambridge Global Payments

- Developed various scripts using VBA on Excel for database management.
- Did an explicit *Exploratory QA Testing* for the company's new web application.
- **Researched** and compared various APIs, Blockchain, and MFA technologies as well as various JavaScript based frontend and backend third party applications.

Junior Telecom Specialist | Saint Elizabeth Health Care

- Automated lengthy manual tasks by developing PowerShell scripts and increased work productivity by up to 300%.
- Analyzed and summarized report data on Telecom costs, volume, and usage as well as participated in a special project on asset management with the CIO.
- **Tested** new ticketing software and Avaya mobile applications.

RECENT PROJECTS

Mr Smithers (WIP) | Dialogflow (Api.Al), NodeJS, Express, JavaScript

- Developing an Al Messenger chatbot, using Natural Language Processing from Dialogflow (Api.Al).
- Once finished, it will act as a personal assistant helping users with reminders, checklists, weather, maps, etc.

Online Market Structure (WIP) | Spring Framework, Maven, Thymeleaf, Java

- Working on this project as an attempt to learn how to develop full stack web apps.
- The final result will be a skeleton template for an online market store which can be used for various businesses. It will use Stripe payments, and will be deployed on AWS.

Color Chat Room | JavaScript, NodeJS, WebSocket, HTML, CSS

- Developed a live web chat application in an attempt to learn NodeJS and WebSocket.
- The serve assigns a unique color to every new user, and sends them the chat history.

Ping Pong | JavaScript, HTML

- A remake of the classic single player Ping Pong video game, with Artificial Intelligence.
- The ball deflects from the paddle with different speeds and angles, depending on which part of the paddle it hits.

ProSeeMety | Arduino, Swift

- Developed an attachment for glasses which acts as a guiding tool for deaf people.
- Algorithms like Sound Fingerprinting and Acoutic Localization were used, along with hardware like Arduino, LED lights, etc.

SKILLS

Languages:

C, C++, Java, Python, JavaScript, HTML, CSS, Bash, Scheme, SQL, MIPS

Frameworks and Tools:

Bootstrap, ReactJS, Redux, Git, JIRA, Dialogflow (Api.Al)

Basic Knowledge:

NodeJS, WebSocket, Spring Framework, Apache Maven, Android Studio, R

Strong understanding of OOP concepts, Design Patterns, UML diagrams, MVC architecture, Data Structures, Algorithms.

RELEVANT COURSES

- Operating Systems
- Algorithms
- Numerical Computation
- Object Oriented Software Development
- Data Structures and Data Management
- Foundations of Sequential Programs
- Logic and computation
- Combinatorics and Optimization
- Statistics, Probability

INTERESTS

- Cooking, photography, sketching, music
- Artificial Intelligence and Human Computer Interaction
- Learning about new coding languages, technologies, and concepts

EDUCATION

University of Waterloo

- Candidate for Bachelor of Computer Science | 2015 – 2020