Shivam Patel

Ontario, Canada | linkedin.com/in/patels97 | 647-962-9121 | patelsd96@gmail.com | shivampatel.ca

Programmer that really enjoys creating and building new things. Whether it's a simple website or a complex application, the process of solving hard problems and seeing my creations come to life is extremely satisfying.

RELEVANT SKILLS

Computer: Python, Javascript, React, HTML, CSS, SQL, Ruby, Rails, Cypress, Mocha, Chai, Jest, Storybook, Microservices

Environments: Linux, NodeJS, Bash, Vagrant, Git, Powershell, Unix

WORK EXPERIENCE

Mazlite Toronto, ON

Backend Developer

November 2021 – Present

- Maximized the usage of limited buffers on the camera with optimized Python functions to save data to RAM, resulting in the ability to capture over 5000 images in one instance
- Implemented a highly flexible camera control library with support for multiple cameras through the use of Abstract Factories.
- Researched, architected and implemented a system that uses onboard GPIO pins to takes signals from other robots and interface with commercial PLC boards
- Backend development with Python and FastAPI to create a websocket class that allows the backend to effectively communicate with the front-end
- Implemented the Paho-MQTT library with SSL to bring fast and low bandwidth communication between servers on the cloud and over wireless communications
- Created microservices like heartbeat that can auto send data
- Implemented low level camera functions to time a flash based on a falling edge signal
- Implemented threading to simultaneously capture camera buffers and stream the same buffers to the front-end, using async functions and generators
- Configured linux systems for deployment: netplan, kernel, tcp/ip protocol, BMC, BIOS configurations

TD Securities Toronto, ON

Operations Developer/Analyst

August 2020 - November 2021

- Reconciled \$2,000,000 worth of lost precious metals in Python (pandas) and Excel
- Utilized RPA software like UiPath to automate operational tasks that saved the team more than 10 hours a week

MedEssist Toronto, ON

Junior Full Stack Developer

July 2020 – December 2020

- Built the front-end skeleton in ReactJS and utilized firebase for the backend
- Developed the backend of the vaccine booking platform making functions that follow basic CRUD principals

PROJECTS

Interview Scheduler

github.com/ShivamP96/scheduler

- ReactJS App that schedules interviews with full capabilities
- Front-End: ReactJS, JSX, HTML, CSS, JavaScript
- Back-End: Express, Postgres

Quick Notes github.com/ShivamP96/Quick-Notes

Smart To-Do List App that auto categorize items using the WolfRam Alpha API

- Front-End: ReactJS, JSX, HTML, CSS, JavaScript
- Back-End: Express, Postgres

EDUCATION

Lighthouse Labs Toronto, CA

Full Stack Web Development Diploma

• Created a variety of projects that showcase different skills in front-end and backend development

McMaster University
Honours BSc. in Medical and Health Physics (Nuclear)

Hamilton, CA
Graduation Date: June 2019

Graduation Date: March 2020

• Studied Nuclear Physics and high level mathematics and worked on Co-op's with OPG and McMaster Nuclear