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

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

Tools: Linux, NodeJS, Bash, Vagrant, Git, 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 the RAM. Enabling the system to capture at 250 FPS vs 60 FPS while simultaneously minimizing toxic waste from prolonged spray use due to slow capture speeds
- Successfully implemented a highly flexible camera control library with support for multiple cameras through the use of Abstract Factories. Resulting in seamless integration from a wide range of cameras with the current system
- Researched, architected and implemented a system that uses onboard GPIO pins to take signals from automotive robots and interfaces with commercial PLC boards. System captured data at a 100% success rate
- Built websocket middleware to establish a connection to the front-end in Python and FastAPI, allowing the system to significantly reduce latency and ensure real-time capabilities
- Implemented the Paho-MQTT library with SSL to bring rapid and low bandwidth communication via cloud servers and wireless communications. Reduced signal interference by 50% from the previous implementation
- Created microservices like heartbeat that can auto send data, allowing our internal team to keep track of the health of our systems in client environments
- Implemented Python 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 to get the company up and running
- 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   *Graduation Date: March 2020*
- Created a variety of projects that showcase different skills in front-end and backend development

McMaster University   **Hamilton, CA**
Honours BSc. in Medical and Health Physics (Nuclear)   *Graduation Date: June 2019*
- Studied Nuclear Physics and high level mathematics and worked on Co-op's with OPG and McMaster Nuclear