

# Aditya Patel

6478923968 | [adityakdpatel@gmail.com](mailto:adityakdpatel@gmail.com) | [linkedin.com/in/thisisadityapatel](https://www.linkedin.com/in/thisisadityapatel) | [github.com/thisisadityapatel](https://github.com/thisisadityapatel) | Toronto, ON  
[aditya-patel.com](https://aditya-patel.com)

## EDUCATION

### Toronto Metropolitan University (Prev. Ryerson University)

Sep. 2021 – Present

*Bachelor of Science (Honours), Computer Science (Co-op)*

*Toronto, Ontario, Canada*

- **Relevant Courses:** Data Structures, Unix, C & C++, Operating Systems, Probability and Statistics, OOP
- **Certifications:** Supervised Machine Learning, by **Stanford Online & DeepLearning** ([Certificate](#))

## TECHNICAL SKILLS

**Languages:** Python, C/C++, Java, C#, JavaScript, TypeScript, SQL (Postgres, MySQL), HTML/CSS, Shell Scripting, Rust

**Frameworks:** React.js, Node.js, Next.js, Django, ASP.NET, Flask, Vue.js, jQuery, Jupyter, Wordpress, TailWind CSS

**Tools:** Docker, Git, Kubernetes, Apache Airflow, Kafka, Spark, Elasticsearch, GitHub Actions, Linux, Jenkins, NumPy, Postman

## PROFESSIONAL EXPERIENCE

### Software Developer Intern

May 2023 – April 2024

*Royal Bank of Canada - Innovation and Technology*

*Toronto, Ontario, Canada*

- Engineered a streamlined Log Parsing System for GitHub Actions CI/CD Pipeline with AWS S3, PostgreSQL, Apache Kafka, Apache Spark, and Python3, optimizing log collection, storage, and analysis for actionable deployment pipeline data
- Developed Full Stack Dashboard applications leveraging micro-frontend architecture in React.js and Typescript, utilizing Django back-end alongside mathematical computations to provide DevOps insights and improve story completion by 32%
- Created and managed multiple Python DAGs for scheduled data collection, storage and analysis, from distributed systems streamlining Elasticsearch integration through Apache Airflow, yielding 82% efficiency improvements
- Created scalable Python API, leveraging GitHub Secret Scanning, to automate scanning, alerting and rectifying hard-coded passwords in code across Enterprise GitHub, eliminating security risks at RBC, with over 80000 vulnerabilities revoked
- Collaborated within an Agile development environment, contributing to deliver high-quality software solutions on time

### Trade Floor Software Developer (Web) Intern

May 2022 – Sep. 2022

*Scotiabank - Global Banking and Markets*

*Toronto, Ontario, Canada*

- Engineered an advanced JSON to Excel conversion web application for automating secure and efficient Trade Logging, achieving 27% faster conversion than MSFT API, alongside multi-threading computations, varying depth parsing and robust security features making it an integral tool for the capital markets trading team
- Created a File Validation tool using React.js, ASP.NET and C# algorithms, enabling efficient validation of Excel and CSV files with customizable configurations, empowering users to identify and resolve bulk data issues swiftly
- Built a Full Stack Email Communication Archive tool using ASP.NET, C#, jQuery etc, to store and manage Scotiabank's internal communication emails, with search, filter and attachment handling capabilities, accommodating over 100,000 emails and deployed internally across the bank
- Collaborated on a back-end C# API SSH-File-Transfer, throughout SDLC, leveraging SCP and SFTP protocols, facilitating encrypted file transfer between remote UNIX servers and achieving a significant 38% acceleration in processing rates

### Software Developer

Oct. 2021 – Feb. 2022

*TOThrive - Enactus Toronto Metropolitan University*

*Toronto, Ontario, Canada*

- Conceptualized and architected web applications for an e-commerce start-up incubated by Enactus-TMU DMZ, utilizing Webflow, prototyped in Figma and leveraged SQLite3 database
- Effectively articulate technical challenges and solution to facilitate understanding among engineers and stakeholders

## PROJECTS

**DeskGenius** ([deskgenius.vercel.app](#)) | *Next.js, React.js, Three.js, Tailwind CSS, JavaScript*

May 2023

- 3D Rendering Engine, using Next.js and Three-Fiber, for visualizing table arrangements before purchasing
- Utilizes graphic ray tracing, texture mapping and advanced algorithms to optimize rendering performance & reduce computational overhead, resulting in a highly responsive and immersive user experience, all at no cost

**PetroForecast** ([GitHub](#)) | *Python, React.js, Docker, SQLite3, FastAPI, Jupyter Notebook*

May 2023

- Full Stack Machine Learning Application to predict and analyze US heating oil futures
- Utilizes Prophet library for time-series regression and containerised using docker-compose for easy installation

**SchedulingSignals** ([GitHub](#)) | *C, Bash Scripting*

Jan. 2023

- Project focused on multiprocessing with Round Robin (RR) and Lucky 7 (L7) algorithms for inter-process communication via. signals in C and Bash Scripts, having master-worker cluster architecture
- Minimized latency and optimized data synchronization through algorithms, facilitating seamless inter-process coordination.