Aditya Patel

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EDUCATION

Bachelor of Computer Science, Honours Co-op with Minor in Mathematics — Apr. 2027
University of Windsor — *Windsor, ON*

EXPERIENCE

Teaching Assistant - Computer Architecture I: Digital Design — Sep. 2024 – Apr. 2025
University of Windsor — *Windsor, ON*
- Ran labs to consolidate course content and provided valuable assistance to 30 students each week
- Regularly tutored 5 students on topics such as Boolean Algebra, KMaps, Adders/Subtractors, and Multiplexers

Software Development Intern — Jan. 2024 – Apr. 2024
Glendor, Inc — *Remote, Utah*
- Utilized Meta's LLama AI and Python to detect and censor personal health information in medical documents
- Wrote a script to create test data and ground truths for 500+ text files using Python and Faker
- Automated model analysis by comparing 500+ unique model outputs and ground truths using Python

Programming Lead — Nov. 2021 – Jun. 2023
FIRST Robotics Team 4903 @ Vincent Massey Secondary School — *Windsor, ON*
- Programmed a personalized swerve drive library implemented with C++ and a custom driver dashboard implemented with React
- Brought the robot's capability from 3-4 pieces scored to 8-9 pieces scored per game with PID tuning and software optimizations

PROJECTS

Remora | *Python*
- Developed an interpreted programming language using Python
- Exposed to the inner workings of basic programming languages, lexing, parsing, interpreting and executing
- Implemented features include functions and simple data structures such as arrays and strings

Orrery, Or Are We? | *ThreeJS, TypeScript, Vite, Firebase, HTML/CSS, Git*
- Built a 3D Solar System Model leveraging Three.js and TypeScript to visualize real-time planetary motion

EcoWatch | *React, Vite, Firebase, Tailwind CSS, Git*
- Developed a social networking app that inspires community-oriented environmental activism
- Utilized Firebase, React and Tailwind to implement user authentication and accessible UI/UX
- Included features are local community discovery, community feed, community challenges and goals

Chess Bot | *Java, Swing, Git*
- Created a bot to play chess with algorithms such as min-max, alpha-beta pruning, and hard-coded moves
- Used Swing to create visual elements such as game pieces and UI/UX leading to a user-friendly layout

TECHNICAL SKILLS

Languages: Python, Java, C, C++, JavaScript, Typescript, Lua
Developer Tools: Git, Firebase, VS Code, PyCharm, IntelliJ
Libraries: React, Tailwind CSS, ThreeJS, pandas, NumPy, Matplotlib, Swing, WPILib

OTHER WORK EXPERIENCE

Naval Warfare Officer — Jan. 2024 – Present
Royal Canadian Navy — *In-Person Part-Time*
- Appointed Divisional Officer tasked with supervising a team of 10 members
- Handle administration for members as well as facilitating training and career progression
- Perform additional duties including recruitment, organizing training events and creating unit level policies
- Engaged in training exercises to consolidate skills such as search and rescue, navigation, and leadership