Shreeya Champaneri

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TECHNICAL SKILLS

Languages: Python, Java, Swift, C++, C#, TypeScript, JavaScript, HTML, CSS, MATLAB
Frameworks & Libraries: React, Node.js, Flask, PyTorch, Swing, Bootstrap, Phaser
Technologies: MongoDB, GCP, SOLIDWORKS, Arduino, Xcode, VS Code, Eclipse, Replit, Figma, Miro, Markup.io, M365

EXPERIENCE

eLearning Developer   January 2025 - April 2025
University of Waterloo   *Waterloo, ON*
- Engineered a Node.js backend data automation tool to track 10+ course KPIs, reducing manual analysis time by 60%.
- Developed and deployed 20+ responsive web components and WCAG-compliant learning modules using HTML, CSS, and JavaScript, enhancing accessibility and engagement across Microsoft Azure AI, WEA, WIL, and PD courses.
- Executed cross-platform QA testing and debugging in Agile sprints for Brightspace LMS components, resolving 25+ UI/UX issues across mobile and desktop, enhancing the learning experience for 500+ students.
- Co-led an HTML/CSS workshop for WeAccelerate learners, teaching web development skills and fostering collaboration.

Software Developer   February 2025 - Present
Reality Labs   *Waterloo, ON*
- Designing secure token-based authentication and database integration for a teleoperated humanoid robot.
- Built a colour classification neural network in PyTorch with 99.5% accuracy using synthetic data and Binary Cross-Entropy.
- Developed a 3D Unity game in C# to prototype physics-based motion, input handling, and item tracking.

Backend Developer   March 2025 - Present
UW Orbital   *Waterloo, ON*
- Implementing FastAPI POST/DELETE endpoints with data validation, passing 100% of backend tests.
- Created Python logging middleware to capture API details and execution time, improving debugging.

iOS Developer   July 2022 - August 2022
Our Wave Hub x Apple Canada   *Toronto, ON*
- Pitched and developed an anti-cyberbullying iOS app using Swift and XCode, which won 1st place in UWaterloo's Hi5 Health Informatics Challenge.
- Implemented SDLC, Engineering Design Process, and Agile methodologies with user-centered design and brand sprints, presenting the final solution to Apple executives and iterating on user feedback for project optimization.

Founder and President   January 2022 - September 2024
A.C.E. The Future   *Toronto, ON*
- Founded a student-led organization leading emerging technology talks, webinars, blogs, and workshops that impacted youth across 20+ countries.
- Led and empowered a team of 16 individuals in content writing, event planning, external relations, and graphic design.
- Featured in Ignite Fair, Canada's largest youth-run volunteer fair, showcasing innovation and engaging 900+ attendees.

PROJECTS

EchoMind - GenAI Genesis | *Python, Google Cloud API*   March 2025
- Developed a real-time speech-to-text journaling platform using Google Cloud APIs, enabling users to track emotional expression.

NourishNet - Hack Canada | *Flask, Python, MongoDB*   February 2025 - March 2025
- Led the development of a full-stack web app reducing food waste and hunger, connecting food suppliers with local food banks to streamline distribution.
- Integrated geolocation and authentication APIs (OpenCage, Google Maps, Google OAuth 2.0) to enhance the user experience, ensuring secure and efficient access to resources.

EmpowerAbility - PTC Hacks | *Swift, AVFoundation*   July 2023 - August 2023
- Designed and developed an EdTech iOS app to support students with learning disabilities by converting text to speech using AVFoundation, coupled with a mindfulness feature and sign language chart, winning 1st Place.

FaceMelody - Citro Hacks | *HTML, CSS, JavaScript, ML*   July 2023 - August 2023
- Created a front-end web app utilizing machine learning-based facial recognition to detect mood and recommend personalized music, winning Best Collegiate Hack from 550+ attendees in 49 countries.

EDUCATION

University of Waterloo, *BASc in Systems Design Engineering*   2024 - 2029 (Co-op)

Awards: Top 21 Under 21 Canadian Changemaker, President's Scholarship of Distinction, Foresters Competitive Scholarship
Extracurriculars: Indian Classical Dancer for 9 years, Acrylic Painter, Tech Podcast Co-Host