# MARCELO PONCE ARDON (they/them)

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## HIGHLIGHT OF QUALIFICATIONS

- Recent Computer Science graduate specializing in full-stack development and API integration across Python, TypeScript, and GoLang.
- Designed and deployed scalable solutions using CI/CD pipelines, Docker containerization, and AWS cloud technologies.
- Experienced in database management with PostgreSQL, Redis, and various SQL systems.
- Implemented security best practices including access controls, 2FA deployment, and system performance optimization.
- Strong collaborator in Agile development environments with proven ability to translate technical requirements into functional solutions.

## EDUCATION

**Honours Bachelor of Science (HBSc) in Computer Science** ◇ University of Toronto                 *June 2025*

*Relevant Coursework*: Software Engineering, Programming on the Web, Scalable Computing, Parallel Programming, Computer Security, Neural Networks & Deep Learning, Algorithm Design, Analysis & Complexity

## EXPERIENCE

**IT Administrative Support** ◇ CANVAS Programs                 *Sept. 2025 – Present*

- Provided IT administrative support for a 14+ person organization, managing user account provisioning and deprovisioning, access controls, and security protocols.
- Deployed security solutions organization-wide including Bitwarden password manager with 2FA and anti-virus software across all devices.
- Designed and implemented role-based access control policies, ensuring staff members had appropriate permissions for software and systems.
- Performed daily troubleshooting for hardware and software issues, minimizing downtime for staff operations.

**Barista** ◇ Claudia's Coffee                 *March 2023 – Present*

- Prepared custom espresso drinks and specialty seasonal beverages in a fast paced environment, making up to 45 drinks per hour.
- Opening and closing independently of supervision, cash handling, ordering inventory, arming alarms.
- Developed relationships with customers, connecting management with local businesses.

## PROJECTS

**Wikigraph3d** ◇ Next.js, Typescript, Tailwind CSS                 *Aug. 2025 – Present*

- Built an interactive 3D graph visualization of Wikipedia articles using react-force-graph-3d, enabling spatial exploration of up to 500 interconnected article-nodes.
- Configured automated code quality tooling including TypeScript strict mode, ESLint, Prettier, and Husky pre-commit hooks to enforce type safety and maintain consistent code standards.
- Implemented dynamic, cached graph expansion where clicking article links creates new nodes and edges, visualizing the web of related content in real-time.
- Optimized rendering performance by caching sprites to prevent unnecessary re-renders during node highlighting.
- Integrated Wikipedia API to fetch and render article content dynamically as users navigate the app.

**CTF427** ◇ VirtualBox, Docker, CTFd, Kali Linux                 *Jan. 2025 – March 2025*

- Ran a competitive Capture the Flag (CTF) event designed to teach students about common security vulnerabilities, exploit techniques and challenges (SQLi, Cryptography, Vulnerable Executables, Forensics).
- Built a vulnerable site which contained the 4 main challenges, used the CTFd platform to host the event with scoreboard, hints and solution walkthroughs.
- Taught students how to use Kali Linux tools (sqlmap, steghide, gdb, ghidra), alonside Linux tools for challenges.
- Hosted the two web applications via Docker containers on a VirtualBox VM.

**jiu-jitsu-autoscoring** ◇ Python, Jupyter, PyTorch, Transformers                          *Jan. 2025 – Present*
- Developing a 5-step pipeline of machine learning models to automatically score Brazilian Jiu-Jitsu match videos.
- Utilizing PyTorch and HuggingFace Transformers to fine-tune pre-trained models for person detection, pose estimation and classification on a dataset of annotated BJJ matches.

**Opalescence** ◇ GoLang, PostgresSQL, Redis, Google OAuth2.0.                          *Jan. 2024 – April 2024*
- Co–led a team of 7 to design and build a web-based sharable note-taking application, overseeing backend development.
- Implemented a RESTful API using GoLang (GinGonic) and PostgreSQL (GORM), with hosted Redis for caching.
- Integrated GitHub Actions for CI/CD, Google OAuth2.0 for user authentication.

## SKILLS

**Programming Languages:** C/C++, Bash, Python, TypeScript/JavaScript, Java, GoLang, C#, SQL, HTML/CSS
**Frameworks & Libraries:** Next.js, Node.js, React, scikit-learn, Pandas, NumPy
**Tools & Technologies:** Docker, Git, GitHub, LaTeX, gdb, Jupyter
**Databases:** PostgreSQL, MySQL, SQLite, Cassandra, Redis
**CI/CD:** GitHub Actions
**Cloud & Platforms:** Amazon Web Services (AWS), Linux
**Methodologies:** Agile Development, Scrum, Automated Testing
**Soft Skills:** Problem-Solving, Team Collaboration, Technical Communication, Client Coordination, Adaptability