

Rowan Arora

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ABOUT ME

Recent computer science graduate with expertise in **backend development**, **AI/ML systems**, and **scalable architecture**. Skilled in **Python**, **FastAPI**, **MongoDB**, and cloud services, with hands-on experience building production-ready APIs, integrating multiple **AI models** (OpenAI GPT-4, Grok, Google Gemini), and developing **natural language processing** pipelines. Proven ability to collaborate with senior engineers in **Agile environments** and deliver high-impact solutions in fast-paced tech companies.

EDUCATION

University of Toronto, St. George

Honors Bachelor of Science, Computer Science

Toronto, ON

Graduated: June 2025

TECHNICAL SKILLS AND CERTIFICATIONS

Languages: Python, Java, C, C++, SQL, JavaScript, HTML, CSS, TypeScript.

Frameworks & APIs: FastAPI, REST APIs, Django, Flask, React, Vue.js, TensorFlow, Keras, PyTorch.

Cloud & Databases: MongoDB, Azure Functions, Azure Service Bus, PostgreSQL.

Tools & Platforms: Git, Bitbucket, Jira, Docker, pytest, pandas, scikit-learn, nltk, LaTeX, Postman.

Certifications: Coursera Deep Learning Specialization (Neural Networks, CNNs, Sequence Models, etc.).

EXPERIENCE

Python Developer Intern | *Python, FastAPI, MongoDB, Backend/API Development, NLP, Azure* May. 2025 – Present
ContractPodAI *Toronto, ON*

- **Developed and debugged backend APIs** using **FastAPI** for Leah, a proprietary AI assistant for legal contract redlining, building **15+ new endpoints** from scratch and fixing existing functionality to serve frontend and database integration needs, improving API reliability and response times.
- **Engineered document ingestion pipeline** using **Azure Functions** and **Azure Service Bus**, optimizing data processing workflows and reducing pipeline overhead by **15%** through implementing efficient processing pipelines for **natural language processing (NLP)** tasks and integrating with **OpenAI's GPT-4, Grok, and Google's Gemini** APIs.
- **Designed and implemented database schemas** and models in **MongoDB**, managing **50+ collections** for uploaded documents, internal response/request models, and product data, ensuring optimal data structure for the legal tech platform and improving data organization.
- Collaborated with **7+ senior software engineers** in an Agile environment, handling **1-2 tickets daily** via **Jira** and **Bitbucket**, participating in code reviews and contributing to production-ready features deployed to **1000+ active users**.
- **Performed quality assurance testing** during initial onboarding, reporting **20+ bugs** to improve model accuracy and reliability in high-stakes legal workflows, then transitioned to active development role.

Lead Software Developer | *HTML, CSS, JavaScript, Python, TensorFlow, Keras* May. 2024 – May. 2025
InkTank *Toronto, ON*

- Developed 3D tattoo visualization platform using **Vue.js** and **Vite** with **generative AI** features for realistic body modeling and preview functionality.
- Optimized frontend performance achieving **25% faster page load times** and creating intuitive user experience for **100+ tattoo artists and clients**.

Software/Robotics Intern | *XML, Fusion 360, ROS 2, Gazebo* Jun. 2024 – Aug. 2024
Evodyne Robotics Academy *Mountain View, CA*

- Recreated Evodog robotic model using **CAD modeling**, mastering **ROS 2** and **Gazebo** within **5 weeks**.
- Enabled virtual simulations reducing resource usage by **50%**, saving **100+** hours of testing time and improving design accuracy by **25%**.

PROJECTS

Key-Value Database System API | *C++, Python, SQL* September 2024 – December 2024

- Designed and implemented a scalable key-value database system using **Memtables, SSTs, LSM-Trees, and Bloom Filters**, achieving **30% improvement in query efficiency** and supporting datasets beyond **10GB** with sub-millisecond latencies.
- Developed a user-friendly API with comprehensive testing on **100,000+ key-value pairs**, supporting essential operations (put, get, scan, delete) and co-authored technical documentation for deployment.

mhapy Sentiment Analysis Model | *Python, Flask, nltk, TensorFlow, Keras* September 2023 – December 2023

- Developed a sentiment analysis model and API using **TensorFlow** and **Keras** with **98% accuracy** on **10,000+** user-generated content pieces for mental health trend analysis.
- Built and integrated **Flask**-based backend with robust RESTful API endpoints, ensuring secure data handling and real-time analysis capabilities for production deployment.