Krish Desai

647-458-9009 | krishhsdesai@gmail.com | linkedin.com/in/krishhdesai | github.com/KrishD22

EXPERIENCE

Rounds.so   June 2025 – Present
Founding Engineer | Flask, React, PostgreSQL, OpenAI, Google Cloud, Firebase   *Atlanta, GA*
- Built a real-time, **full-stack** mock interview platform enabling live collaborative coding, structured peer feedback, and **AI-powered code review** using **Monaco Editor**, **OpenAI API**, and custom **Flask APIs**
- Scaled infrastructure on **GCP**, **Firebase**, and **PostgreSQL** to support **thousands of users** with **200ms** response time and **99.9% uptime**
- Reduced interview setup time by **40%** through interactive scheduling tools and dashboards powered by **Axios** and backend **metrics endpoints**
- Drove rapid prototyping with co-founders to streamline onboarding and achieve a **25% boost** in session completion via **JWT authentication**, responsive **UIs**, and user-driven iteration

University of Toronto   Sep. 2024 – Present
Research Assistant | Python, HTML, CSS, JavaScript, TensorFlow, Deep Learning   *Toronto, ON*
- Developed **"Astraeus," under Dr.Aviad Levis**, an AI-powered imaging pipeline in **Python and TensorFlow** to reconstruct black holes from radio telescope data, achieving **31% sharper resolution** than baseline models
- Trained a **deep neural network** on **1.4TB of simulated telescope data**, decreasing reconstruction time by **6×** while improving image accuracy (SSIM) from **0.58 to 0.85**
- Deployed a research website and GitHub repository, generating **600+ unique visitors** and **downstream forks** by researchers in the first month, enabling reproducibility for research teams across domains
- Delivered a **45-minute talk** at UofT's **CS Academy** to 30+ students and PhDs, sparking a follow-up collaboration to scale the pipeline for **multi-dish telescope arrays**

Stacked Pancakes Breakfast House   May 2024 – August 2024
Software Engineer | Python, Flask, Twilio, Pandas, REST APIs, Docker   *Toronto, ON*
- Engineered an AI call assistant using **Twilio** and **Python** for **3 franchise locations**, reducing average call time by **40%** and lowering staff workload by **30%**
- Analyzed call data to benchmark **AI vs. human performance**, informing rollout decisions that improved **customer satisfaction by 15%** while maintaining **cost-efficiency**
- Integrated scheduling and FAQ systems, enabling **autonomous resolution** of common queries and saving **$8700 per location annually** in labor costs
- Deployed a live fallback system to **human agents**, maintaining **service continuity** and increasing **peak-hour call capacity by 2.3×**

PROJECTS

Mind Controlled AI Wheelchair | *Python, Flask, React, PostgreSQL, Docker*   Link
- Converted **EEG brain signals** into real-time wheelchair commands with **95% directional accuracy** by integrating **pylsl**, boosting mobility for users with motor impairments
- Minimized noise in live EEG streams by **60%** using a custom signal processing pipeline with **buffering**, **notch filtering**, and **multi-band decomposition** (alpha, beta, theta, delta)
- Accelerated control feedback loop by **35%** through a containerized **Python–React pipeline** using **Flask**, **PostgreSQL**, and **Docker**, enabling responsive mental-state-driven navigation

EDUCATION

Turner Fenton Secondary School | *GPA: 4.0*   Brampton, ON
International Baccalaureate Diploma Programme   *Sep. 2022 – Jun 2026*

TECHNICAL SKILLS

Languages: Python, JavaScript, TypeScript, HTML/CSS, C++, SQL (Postgres), MATLAB, JSON
Frameworks: React, Node.js, Flask, TailwindCSS, FastAPI, Bootstrap, Dialogflow
Developer Tools: Git, Docker, Google Cloud Platform, REST APIs, Arduino, Firebase, Command Line
Libraries: Pandas, NumPy, Matplotlib, PyTorch, TensorFlow, NLTK, scikit-learn, OpenAI, JWT