Anish Goel

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EDUCATION

California Institute of Technology (Caltech)

Sept. 2022 - June 2026

B.S. Applied and Computational Mathematics

Pasadena, California

GPA: 4.1/4.0

Coursework: Intermediate Programming, Data Structures, Algorithmic Complexity, Statistical Physics (Audit)

EXPERIENCE

Stealth Startup

8VC Engineering Fellow, San Francisco, CA

- One of the first hires at a stealth security company with \$18M in funding
- Working closely with Kevin Hartz (founder of Eventbrite) to prototype the MVP

Pantera Capital Research Fellow

Mentor: Matt Stephenson, Head of Research

- 1 of 10 fellows selected for inaugural cohort from 215+ applications
- Learnt the mathematical underpinnings of fully homomorphic encryption and zero-knowledge ML
- Research paper pending publication

Lab Technician & AI Researcher

Dr. Richard Naud, Faculty of Medicine, University of Ottawa

- Developed brain-inspired neural networks that outperform classical machine learning
- Co-invented a new class of AI algorithms (PRC models) that reach SOTA performance on spiking datasets for a neuro-inspired model
- Designed numerical methods for eliminating catastrophic forgetting in deep neural networks

Data Science Researcher

Dr. Paula Branco, Electrical Engineering & Computer Science, University of Ottawa

- Created training paradigms to improve imbalanced neural network performance
- Built oversampling methods & variational auto-encoders to improve imbalanced classification by $\sim 10\%$
- Ran simulations in Python and created cloud computing servers to train large vision models

Computational Biology Researcher

Dr. Daniel Figeys, Faculty of Medicine, University of Ottawa

- Discovered >50 novel proteins and pathways involved in Alzheimer's Disease
- Created a data science pipeline to analyze protein expression changes in transgenic mice
- Recieved lab clearance at the age of 14 to work with animals and wet-lab instruments
- Invited to international science competitions and conferences

OTHER ACTIVITIES

Hosting Defense Tech hackathons supported by 8VC, Entrepreneur First, and leading military orgs

Analyst at VC firm Press Start Capital

Rep. for the Caltech Board of Control

Trainer for the Caltech Women's Basketball team

Major Honors & Awards

Caltech Housner Fund Fellow	2023
VitaDAO Longevity Research Fellowship	2023
Press Start Capital Fellowship	2023
1517 Medici Entrepreneurial Grant	2023
SURF Research Fellowship in Caltech's Vision Lab (declined)	2023

Publications

Harkin, Emerson F., Peter R. Shen, **Anish Goel**, Blake A. Richards, and Richard Naud. "Parallel and Recurrent Cascade Models as a Unifying Force for Understanding Subcellular Computation." *Neuroscience* (2021).

Citations: 8