

Aryan Misra

aryanmisra4@gmail.com

WORK EXPERIENCE

Kerna Labs

May 2024 – Present

Machine Learning Intern

San Francisco, California to Remote

- Developed state-of-the-art models architectures for various prediction tasks, performing advanced statistical analysis and processing on large-scale biological datasets.
- Built state-space foundation models for downstream prediction tasks, leveraging HPC (AWS Batch, Slurm, ParallelCluster) for high-throughput data processing.
- Computationally designed molecules that were validated by lab experiments to exhibit desirable characteristics, driving ongoing ML initiatives and end-to-end infrastructure/data management.

McMaster Automotive Resource Center

May 2023 – April 2024

Applications Specialist

Hamilton, Ontario

- Built an internal database management application with Next.js on Azure Static Web Apps, integrating SQL, Azure Storage, and Azure Functions to optimize backend processes.
- Created an ML-based clustering visualizer enabling real-time detection of battery faults during production line quality assurance.

Beanstalk Farms (Decentralized Autonomous Org.)

March 2022 – December 2022

Solidity Developer

Remote

- Developed a gas-optimized Solidity library to support on-chain piecewise polynomial asset pricing, increasing marketplace liquidity depth.
- Collaborated with Halborn Blockchain Security on a comprehensive code audit for V2 of the protocol's Pod marketplace.

Monument Labs

August 2021 – November 2021

Co-Founder

San Francisco, California

- Secured a VC-backed pre-seed round from prominent investors (Nima Capital, Nascent.xyz, Dan Elitzer, Naval Ravikant) to build a social token platform.
- Led initial product development before the company's pivot to Serendipity (a PRM platform).

Bitswap Inc.

March 2021 - August 2021

Co-Founder & Engineering Head

Toronto, Ontario

- Built Bitswap.network, an off-ramp exchange orderbook platform for the decentralized social network Bitclout.
- Processed over \$3M in transaction volume across 6,000+ users and received a \$100K offer for a 1% stake from Dharmesh Shah.

EDUCATION

University of Toronto

September 2022 - June 2026

Mathematics/Statistics (dbl. Major, Arts & Science Faculty)

Toronto, Ontario

NOTABLE PROJECTS

Synbiolic

March 2021

Microsoft Imagine Cup Finalist

Mexico City

- Generative model for small-molecule creation and retrosynthesis pathways using Azure ML and IBM's RXN.

Neurascale

May 2019

Google #PoweredByTensorflow2.0 Challenge Winner

Virtual

- Implemented a super-resolution GAN (SRGAN) in TensorFlow 2.0 to upscale images with minimal loss.

SKILLS & INTERESTS

- **Skills:** Python, Javascript (React, Next.js), Solidity, Go, C++
- **Interests:** biology; finance; economics; chess; gym

[Github](#) / [Devpost](#)