
Education

Cornell University, College of Engineering

Dean's List 3.5 GPA, May 2023

BSc in Mechanical Engineering, Dyson Business Minor for Engineers

- **Advanced Topics in Machine Learning (PhD class), Robot Learning and RL, Data Science and Inequality**, Fast Robotics, Advanced Product Design, Technology Strategy, Mechatronics, Finance, Economics

Professional Experience

Associate Operations Consultant

6 months; June 2021 – Dec 2021

Chartwell Consulting

- **Presented on 20-30% manufacturing efficiency improvements** to pharmaceutical client C-suite, translating to 50%+ site-level profit increase per year
- **Conducted intensive quantitative and qualitative data analysis on machine-level operational efficiency** of pharmaceutical bottling lines, demonstrating ability to collaborate closely with executive to temp-worker level staff
- **Led development of novel prospect development KPIs, metrics, web scraping tools** to accelerate project sales to US, UK, and EU private equity firms

Data Analyst, iPhone Technical Product Operations

June 2021 – Dec 2021

Apple, inc.

- **Designed high-quality end-to-end data solutions for camera lens production** to reduce data processing (ETL) workloads by 90% with Tableau, machine learning, and Hadoop related cloud computing tools
- **Independently wrote new Python packages for a data pipeline** for 40x faster data transformation from SQL databases and file sharing platforms for file- and format-agnostic data interpretation with Python
- **Praised by Director-level leadership for outstanding presentation skills** to optics engineering and lens operations groups to build pathways for expansion for a new internal data analytics solution

Engineering & Business Development Associate

Jan 2021 – May 2021

Bluespace.ai – Autonomous driving startup with Forbes 30u30 CEO

- **Helped win the 2021 Nasa iTech grant** in leading design and implementation of mission-critical investor and partnership materials, with data-driven analysis of ADAS, OEM vendors, and Tier 1 competitors and partners
- **Overhauled company branding and web presence** using HTML, CSS, and JavaScript web development programming, with implementation of Google Analytics-enabled SEO strategies for improved sales funnel

Mechanical Engineer

October 2019 – June 2023

Cornell University Autonomous Underwater Vehicles – 2022 Robosub 6th

- **Cut 30% cost and 50% production time of underwater systems** with improved DFM and DFA, using SolidWorks CAD, FEA, and Autodesk machine learning generative design
- **Organized 4-stage design review process**, collaborating with cross-functional teams, to promote efficient vehicles systems integration of electrical, software, and mechanical teams for autonomous mobility

Projects

Breathe+

November 2022 – Present

Tele-health Pulmonary Rehabilitation at breathepl.us

- Web development for personal non-profit project for improving healthcare accessibility

ModelMonkey

August 2023 – Present

Low-code Machine Learning Model Builder

- React app development for improved and interactive visualisations for machine learning academia

MoFlowGAN

June 2023

Combining adversarial and likelihood learning for targeted molecular generation

- Second author of pre-print AI paper viewable at [chemrxiv](https://chemrxiv.org)

RainGAN

October 2019 – Present

High-fidelity generative environmental audio from 10 seconds of data

- Personal AI project based Improved RVQGAN, Catch-a-Waveform, and Encodec papers with novel improvements