# Sai kumar Murali krishnan

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Machine Learning Engineer

## EDUCATION

**Monash University**                                                Expected December 2023
*Bachelor of Applied Data Science Honours*                                   *Melbourne, VIC*
- WAM/GPA: 86
- Achievements: Dean's List Award for academic excellence, Summer and Winter Research scholarships

## EXPERIENCE

**Machine Learning Engineer Intern**                          November 2022 – February 2023
*Canva*
- Developed a debiasing framework for StableDiffusion, a text to image model
- Researched bias mitigation for harmful and nonrepresentative outputs from text to image models

**Co-founder and Tutor**                                     February 2020 – November 2022
*Contour Education*
- Prepared mathematics worksheets for over 100 students undertaking the VCE
- Creation of software in the Wolfram Mathematica language for over 300 students

**Data Science Intern**                                            July 2022 – October 2022
*DiGiCOR*
- Led a team of four to develop a dashboard for sales data analysis in Streamlit, pulling data from NetSuite's REST API to improve the productivity of the DiGiCOR sales team

**Winter Research Assistant**                                        June 2022 – July 2022
*Monash University*
- Devised a genetic programming framework for a game theoretic problem via simulation in Julia **here**
- Coordinated with a professor to investigate scientist journal dynamics using the above framework

**Summer Research Assistant**                                November 2021 – January 2022
*Monash University*
- Wrangled commit diffs from over 30,000 deep-learning libraries using GitHub's REST API in Python
- Extraction, tagging, and inference of evolution of popular deep-learning libraries with spaCy

## COMMUNITY & LEADERSHIP

**President**                                                         March 2021 – Present
*Monash Association of Coding (MAC)*
- Taught 4 coding workshops totalling over 200 attendees in Python - FastAPI, discord.py, and web development
- Ran 15 weekly mock technical interviews with LeetCode in preparation for software-development roles
- Managed MAC x Hacksprint, a two-week hackathon with over 200 participants

## PROJECTS

**Mini Melbourne** | *Fullstack, Live data, React, Mapbox, FastAPI*            GitHub - DevPost
- A live train map of Melbourne, built during UniHack 2022, winning the PwC Data Analytics prize
- Built using FastAPI for backend, serving real-time train data of upto 150 trains

**SETool** | *Data Visualisation, Python, Scraping, Dash, Plotly, Heroku*          GitHub - Site
- A web dashboard for comparing course reviews, used by over 1000 students

**uwucode** | *Language Design, Rust*                                              GitHub
- A toy programming language designed in Rust, with a homemade parser to learn about language design

## TECHNICAL SKILLS

**Languages**: Python, C/C++, R, Rust, MATLAB, Java, Wolfram Mathematica
**Libraries**: Data science (Pandas, NumPy, SciPy, PyTorch, Seaborn, Streamlit), FastAPI, Dash/Plotly
**Mathematics**: Graph Theory, Computational methods, Optimisation and Operations Research, Linear Algebra, Calculus, Statistics