Anna Midgley

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EDUCATION

Harvard University Aug. 2022 – Present
Master's of Engineering in Computational Science & Engineering Boston, MA

- Relevant Coursework: Advanced Scientific Computing - Numerical Methods, Systems Development for Computational Science, Bayesian Inference, Machine Learning (MIT)

University of Cape Town Jan. 2018 – Dec. 2021
Bachelor of Science in Chemical Engineering - First Class Honours Cape Town, South Africa

- Class medal for overall top-performing student with the highest GPA
- Relevant Coursework: Numerical Simulation, Numerical Optimization, Vector Calculus, Linear Algebra and Differential Equations, Statistical Design & Data Analysis

EXPERIENCE

DataProphet Feb 2022 – July. 2022
Data Science Intern Cape Town, South Africa

- DataProphet is an AI-as-a-Service company that specialize in machine learning optimization of manufacturing processes, recognized by the World Economic Forum as both a Technology Pioneer and a Global Innovator.
- Designed a general variational autoencoder module to be used by the technical team.

Boston Consulting Group Nov. 2021 – Dec. 2021
Visiting Associate Johannesburg, South Africa

- Designed a 5-year strategy with a team for a global chemicals and energy company to improve their retail trade sector.

PROJECTS

JAXED-UP Optimization of the Carbon Dioxide to Methanol Process - Undergraduate Thesis

- Demonstrated that JAX, a Python library developed by Deepmind, can be used to improve process optimization, leading to better optimals being found using the carbon dioxide to methanol process as an example problem.

FUNDING & AWARDS

Skye Scholarship 2022 – 2023
Scholarship awarded for academic excellence for postgraduate studies at Harvard University.

Gold Malan Chemical Engineering Medal 2021
Awarded to the best student in the undergraduate degree program at the University of Cape Town.

Vice Chancellor's Scholarship 2018 – 2021
Scholarship awarded to the top 10 applicants to the University of Cape Town.

SKILLS

Languages : Python (JAX, Tensorflow, Scikit-Learn), MATLAB, R, SciLab,
Tools : Git, LaTeX, Linux/Unix,