

Derrick Tan

hhdtan.github.io

Contact Info

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Education

Bachelor of Engineering (2018 – 2023)

Memorial University of Newfoundland

CGPA: 3.95/4.0 (Consecutive Dean's List)

Cumulative Average: 91.7%

Experience History

Transshipment Project Engineer

ENAIMCO 📍 St. John's, NL

📅 August 2022 – December 2022

Fullstack Developer / Jr. ML Engineer

National Research Council 📍 St. John's, NL

📅 January 2022 – April 2022

GUI Developer (Student Team)

Paradigm Boring Team 📍 St. John's, NL

📅 September 2020 – December 2021

Python Supplementary Instruction Leader

Memorial University 📍 St. John's, NL

📅 January 2020 – April 2020

Pet Projects

Coursera & Stanford Online

Machine Learning Specialization & CS229
(TensorFlow)

Image Text Extraction

Automated data entry using Tesseract, NodeJS,
OpenCV, and Discord Bots

Professional Summary

Data scientist with 3+ years experience in converting data into storyboards across engineering industries. Proficient in data visualisation, data wrangling, and machine-learning to improve workflow efficiency. Spearheaded two proof-of-concept projects from ideation into full-fledged projects backed by NRC & the Navy.

Skill Highlights

Scripting & Backend (Exploratory Data Analysis)

Python (Pandas, NumPy, SciPy, Numba, Sklearn, XGBoost)

- Sped up processing time of a simulation engine by a factor of 100 with JIT compilation & vectorisation
- Developed probabilistic wave insights to optimise transshipment scheduling system, reducing fuel consumption by 10% & CO₂ emissions by 15%
- Automated data retrieval & organisational tasks that converted recurring hourly affairs into seconds
- Reverse engineered a fatigue damage calculator using ML models

Frontend (UI/UX Developer & Data Visualiser)

Python (Plotly Dash) & Docker

Username: **hhdtan** | Passkey: **shipdatavisuals**

- Prototyped an interactive dashboard to address the lack of a dedicated exploratory data analysis tool in the span of two weeks
- Deployed the dashboard on the client's machine for a pitch, successfully securing a 500k grant from the Navy

Angular (TypeScript, HTML, CSS)

- Designed a GUI to visualize & communicate real-time telemetry of a tunnel-boring machine

Personal Interests

Storytelling with data, right-to-repair, woodworking, fencing, sustainability, hiking, and crocheting sharks

