

Australian citizen eligible for E3 work authorisation (requires only \$400 filing fee and 2 weeks processing time)

PROFESSIONAL SUMMARY

Researcher with a Master's in Theoretical Physics and 2+ years of business research experience, combining expertise in mathematical modeling and statistical analysis with strategic thinking. Skilled in using Python and Excel to translate complex data into actionable insights. Proven ability to identify trends from large datasets and communicate findings effectively. Passionate about leveraging diverse data sources for financial analysis, as demonstrated through self-developed stock analysis platforms and in-depth quantitative research.

TECHNICAL SKILLS

- Data Science:** Data analysis, data visualization, statistical modeling, time series analysis
- Mathematics:** Linear algebra, stochastic calculus, optimization, differential equations
- Programming:** Python (NumPy, Pandas, Pytorch, Matplotlib), Excel (VLookUps, Macros, Pivot Tables), Linux terminal, SQL

PROFESSIONAL EXPERIENCE

- 08/2022
current

Research Analyst **Project Eaden**
 - Contributed to multiple areas of the business as the company's first employee, scaling from 1 to over 20 team members.
 - Research:** Led literature review of 400+ scientific papers, identifying critical research that resulted in the change of our main ingredient, which almost doubled our consumer acceptance scores.
 - Financial Analysis:** Developed a model for ingredient costs across all SKUs, projecting how costs would scale with increased production volumes to inform pricing strategies and margin forecasting.
 - Intellectual Property:** Delivered on patent strategy including writing and filing a patent, and conducting a Freedom to Operate analysis, which boosted investor interest in our next funding round.
- 11/2020
07/2022

IT Support Technician **Free University Berlin**
 - Solved the IT problems of university staff and students for their Linux and Windows computers.
- 09/2017
06/2019

Teaching Assistant **University of Groningen**
 - Tutored students in tutorials and labs, as well as mentoring students. I received the most recommendations of any other tutorial assistant in the department that semester.

EDUCATION

- 2019
2022

Research Master's in Theoretical Physics **Free University Berlin**
 - Year-long masters thesis in the field of classical and quantum chaos at the Max Plank Society
 - Completed advanced coursework in Deep Learning and Machine Learning
- 2016
2019

Bachelor's of Science in Theoretical Physics **University of Groningen**
 - Thesis on Non-Relativistic Supersymmetry
 - Emphasis on quantitative analysis and problem-solving

PROFESSIONAL DEVELOPMENT

- 12/2024

Built Automated Stock Analysis Platform: cianhamilton.com
 - Developed python-based system automatically analyzing daily S&P 500 stock movements, statistical indicators, and news, to explain significant price movements. Another webpage summarizes SEC filings as they are published.
- 2024

Coursera
 - Completed intensive 106-hour Advanced Excel Specialization, mastering financial modeling, VBA programming, automated reporting systems, and advanced analytics functions.
- 2024/2025

Self-study with Textbooks (studied cover to cover)
 - Modern Principles of Economics, by T. Cowen and A. Tabarrok.
 - Mathematical Statistics with Applications, by D. Wackerly
 - Storytelling with Data: A Data Visualization Guide for Business Professionals, by C.N. Knaflc
 - Learning SQL by A. Beaulieu
 - Forecasting: Principles and Practice by R. J. Hyndman

ADDITIONAL ACHIEVEMENTS AND INTERESTS

- 03/2022

Scientific paper **Link to paper**
 - Main author of an academic article in the field of quantum chaos. I presented this work at the scientific conference SAMOP21.
- 07/2022
08/2023

Volunteer Research Analyst Work for a Non-Profit **SWP**
 - Assisted economic modeling (collating relevant academic papers, summarizing, and analyzing data).
 - Ran project on building a framework to help prioritize cost-effective interventions.
- Other Interests**
 - Sailing (ex-sailing instructor), ultramarathon running, ultimate frisbee, classic novels, and math puzzles.