CHRISTOPHER DENQ

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SUMMARY

Early-career **data scientist** seeking to transfer passion and drive into building **AI governance** solutions. **Technical industry experience** in analytics and machine learning augments empirical methodologies for policy research; unique undergraduate background in **philosophy and art history** provides strong foundations for epistemics. Self-taught transition from the art market to data science demonstrates resiliency, resourcefulness, initiative, and commitment to long-term projects.

EDUCATION

University of Pennsylvania | Philadelphia, PA

BA, Philosophy and Art History

Aug 2015 – May 2021

Candidate in BS, Economics, concentration in Statistics (Wharton)

Aug 2016 – May 2018

• Honors: John C. Parker Fellowship Grant, 2016 (\$500 for statistical game theory research in board game scenarios)

University of Illinois – Springfield | Springfield, IL

BA, Mathematical Sciences, minor in Legal Studies

Jan 2023 - Present

- Note: Taking courses part-time to gain rigorous mathematical understanding of AI models
- Courses: Linear Algebra, Mathematical Statistics, Probability, Statistical Methods, MV Calc, Discrete Math., Dif EQs

Stanford University | Stanford, CA

Non-Degree

Sep 2022 – Dec 2022

• Courses: Introduction to AI Alignment (AGI Safety Fundamentals equivalent)

SKILLS & FLUENCIES

• Spoken Languages: Mandarin Chinese (Fluent), Taiwanese Hokkein (Native), Spanish (Elementary)

• Coding Languages: Python (OOP), C/C++, SQL (PostgreSQL), NoSQL (MongoDB), HTML/CSS/JS, APIs, Git

Machine Learning: SKLearn, Keras, TensorFlow, PyTorch, Numpy, Scipy

• Cloud & DevOps: Google GCP, Google Collab, Hadoop/Spark, Docker, Github Pages, AWS

Analytics/Visualization: Tableau, Google Sheets/Apps Script, Google Suite, Excel/VBA, Matplotlib, Seaborn

AI RESEARCH & FELLOWSHIPS

AI Technical Standards Researcher

(5 mos) Mar 2023 – Jul 2023

PI: Dr. Koen Holtman

AI Safety Camp 8 (AISC)

- Supervised by Dr. Koen Holtman, Dutch rep. on Europa technical standards committee (EU CEN-CENELEC JTC21)
- Assisted with developing shovel-ready technical policies for EU AI Act's standardization requests
- Developed minimally acceptable best practices for AI risk management at government level

Stanford AI Governance Fellow

(3 mos) Jan 2023 – Mar 2023

Stanford AI Alignment's SPAR, Stanford University | Stanford, CA

PI: Robi Rahman

 Analyzed historical AI metrics (parameter, compute, dataset) across 31 countries to verify regional forecasting trends and inform governance strategies; published report in Stanford AI-Index

Cambridge Machine Learning Fellow

(1.5 week) Jan 2022

Cambridge AI Safety Hub's MLAB, Cambridge University | Cambridge, England

Contact: Hannah Erlebach

- Worked on transformer interpretability, model training, and hyperparameter tuning
- Projects include building a raytracer, custom ResNet, simple backpropagation framework, custom BERT, and scaled GPT

Berkeley AI Audit Research Intern

(2 mos) Dec 2022 - Jan 2023

 $EA@Berkeley\ Group's\ \underline{GFI},\ UC\ Berkeley\ |\ Berkeley,\ CA$

Contact: Aris Richardson

• Performed literature review of auditing policies across 6 industries (hardware, software, robotics, cybersecurity, pharmaceutical, and financial) with goal of establishing precedents for AI-specific auditing frameworks

ML Student Assistant

(7 mos) Nov 2021 – May 2022

AI-x Group, California State University: Northridge | Northridge, CA

PI: Prof. Wenchin Hsu

- Researched ML education pedagogies and curriculum development for Prof Hsu's Spring 2023 graduate ML course
- Succeeded in delivering 280+ slides, 10+ Java-to-Python code conversion, and applying linear algebra to research

Bioinformatics ML Research Assistant

Systems Biology Laboratory, University of Florida | Gainesville, FL

(1 yr, 4 mos) Jun 2012 – Sep 2013 PI: Prof. Su-Shing Chen

- Researched optimal parameter space for SVM techniques to detect influential biomarkers for Alzheimer's
- Co-authored technical research paper; published in Journal of Clinical Bioinformatics

AI-SAFETY ACTIVITIES & CONFERNECES

Dartmouth AI Safety Club Logistics Volunteer

(2 mos) Dec 2022 - Present

AI Safety x Dartmouth, Dartmouth College | Dartmouth, NH

Contact: Mark Lovett

- Performs logistics for new AI-Safety-specific club at Dartmouth (summer launch); club currently pre-faculty-mentor
- Provides feedback to executive board on how to increase traffic and retention from remote participants

Conferences

EAG London 2023: accepted attendee
EAG Bay Area 2023: accepted attendee
AI Alignment Retreat 2022 (AIR): sponsored attendee (13% admittance)
EAGx Berkeley 2022: sponsored attendee
Dec 2022

INDUSTRY EXPERIENCE

Data Science Apprentice

(4 mos) Mar 2023 – Jun 2023

Adobe Digital Academy | Remote

• Selected scholarship finalist (1.6% admittance) for Adobe x General Assembly's Data Science Immersive program

Data Analyst Intern

(3 mos) Jun 2022 – Aug 2022

PNC Financial Services Group | Brecksville, OH

- Created 8 data products (Python/SQL scripts, Tableau dashboards) to help manage business capacity, performance, and risk
- Successfully saved \$375,000 via data-driven sight on loan pipeline involving 7 departments, 8+ managers, 100k data points

Data Analytics Assistant Instructor & Tutor

(1 yr 3 mos) Sep 2021 – Nov 2022

2U – Trilogy Education Services & Wyzant.com | Atlanta, GA & Remote

- Managed and taught data analytics curriculum; teaching and tutoring over 300+ hours to 65 students
- Successfully performs code reviews, provides feedback on projects, and teaches CS concepts

Data Analyst Fellow

(7 mos) Sep 2021 – Mar 2022

 $2U-Trilogy\ Education\ Services\ |\ Atlanta,\ GA$

• Worked on 4 major projects (including SQL ETL database, full-stack web-based machine learning app)

Art Analyst Intern

(3 mos) Jun 2020 - Aug 2020

Christie's Auctions & Private Sales | New York, NY

- Evaluated 12 artworks at leading luxury art auction house; attended 3+ onsite auctions, hilling meetings
- Succeeded in 3 sales of collections (net value \$19.5M) and contributing to establishing TAMs category (AI art, NFTs)

Non-Profit Founder and Executive Business Operations Manager

(3 yrs, 7 mos) Sep 2016 – Mar 2020

Oasis Commissary @ University of Pennsylvania | Philadelphia, PA

- Started non-profit to address local community issue in dorm
- Wrote grant proposal to Dean, obtained vendor license from city, and upon successful pilot, was absorbed by Penn
- Managed 21 staff, 2 managers, \$2000 bi-monthly budget, 6 marketing campaigns
- Succeeded in business development and serving college dorm; \$1300 gross, 22k purchases, 180 unique clients

HOBBIES

Competitive Escape Rooms ("Ranked Runs") • Resource-Management Boardgames • Tabletop Roleplaying Games