CHRISTOPHER DENQ

Fairfax, VA 22031 • (818) 671-8222 • christopherdenq@gmail.com
cdenq.github.io • github.com/cdenq • linkedin.com/in/christopherdenq

SUMMARY

Junior AI researcher and data scientist seeking to upskill in AI Safety/governance. Passionate about developing internationally robust regulation against GPAI user abuse and threats. Industry experience in analytics and AI modeling augments empirical methodologies for RMS research; unique undergraduate background in philosophy and art history provides strong foundations for epistemics.

AI RESEARCH & FELLOWSHIPS

Incoming AI R&D Assistant and LLM Vulnerabilities Researcher   Expected Jun 2023
University of Pennsylvania, School of Engineering and Applied Sciences | Philadelphia, PA   PI: Prof. Robert Ghrist
- Will advise incoming cohort of 20 junior AI product engineers, each pursuing their own product/research development tracks
- Will conduct own project on generating case examples of GPAI/LLM vulnerabilities, with research outputs applicable to AIS

AI Technical Standards Researcher – EU AI Act   Mar 2023 – Present
European Union x JTC21 x AI Safety Camp 8 (AISC) | Remote   PI: Dr. Koen Holtman
- Supervised by Dr. Koen Holtman, Dutch rep. on Europa technical standards committee (EU CEN-CENELEC JTC21)
- Developing minimally acceptable best practices for AI risk management systems (draft for EU AI Act)
- Specializes on informational hazards and risk levels from unregulated GPAI/LLM models at both the user and societal level

AI Governance Intern   Jan 2023 – Mar 2023
Stanford AI Alignment's SPAR, Stanford University | Stanford, CA   PI: Robi Rahman (Epoch)
- Analyzed historical AI metrics (parameter, compute, dataset) across 31 countries to verify regional forecasting trends and inform governance strategies; published article with Stanford AI Index (pending)

AI Audit Intern   Dec 2022 – Jan 2023
EA@Berkeley Group's GFI, UC Berkeley | Berkeley, CA   PI: Aris Richardson (SERI MATS)
- 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

Machine Learning Fellow   Jan 2023
Cambridge AI Safety Hub's CaMLAB, Cambridge University | Cambridge, England   Contact: Hannah Erlebach (CambridgeEA)
- Worked on transformer interpretability, model training, and hyperparameter tuning
- Projects include building a raytracer, custom ResNet, simple backpropagation framework, custom BERT, and scaled GPT

Machine Learning Research Assistant (Curriculum)   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 mathematics to education

Machine Learning Research Assistant (Bioinformatics)   Jun 2012 – Sep 2013
Systems Biology Laboratory, University of Florida | Gainesville, FL   PI: Prof. Su-Shing Chen
- Researched optimal parameter space for SVM techniques to detect influential biomarkers for Alzheimer's
- Co-authored research paper; published in Journal of Clinical Bioinformatics

AI-SAFETY ACTIVITIES & CONFERNECES

Dartmouth AI Safety Club Officer   Dec 2022 – Present
AI Safety x Dartmouth, Dartmouth College | Dartmouth, NH   Contact: Mark Lovett, Ph.D. Candidate
- Performs logistics for new AI-Safety-specific club at Dartmouth (fall launch); club currently pre-faculty-mentor
- Provides feedback to executive board on how to increase traffic and retention from remote participants

Research Presentations
- **Stanford AI Alignment (SAIA) Research Symposium 2023:** accepted presenter   Mar 2023
- **Berkeley Good Futures Initiative (GFI) Research Symposium 2023:** accepted presenter   Jan 2023

Conferences / Workshops
- **UC Berkeley CLTC: NIST First Draft Framework Workshop:** invited attendee   May 2023
- **EAG London 2023:** accepted attendee   May 2023
- **EAG Bay Area 2023:** accepted attendee   Feb 2023
- **AI Alignment Retreat 2022 (AIR):** sponsored attendee   Dec 2022

- **EAGx Berkeley 2022:** sponsored attendee   Dec 2022

INDUSTRY EXPERIENCE

Incoming Data Science Intern   Expected June 2023
United States Department of Defense, [X-Force](#) | Washington, DC
- Staffed to Naval Surface Warfare Center: Crane Division as part of DoD x National Security Innovation Network (NISN)
- Will developing machine learning (NLP) models that ingest and prioritize AI policy and research development in real-time
- Will provide empirical evidence for various political strategies on the topic of AI national security and safety

Data Science Apprentice   Mar 2023 – Present
Adobe Digital Academy | New York, NY
- Selected scholarship finalist for Adobe's Data Science apprenticeship; engaged in 480+ hours of instructor-led content
- Successfully completed 3 machine learning hackathons, 4 data projects, and 1 capstone project

Data Analyst   Nov 2022 – Mar 2023
Tzu Chi Medical Foundation | Alhambra, CA
- Created 12 data products (data ingestion, dashboards, databases) to increase client insights and operation efficiency
- Successfully decreased patient treatment time by 25% through streamlining healthcare service and office productivity

Data Analyst Intern   Jun 2022 – Aug 2022
PNC Financial Services Group | Brecksville, OH
- Created 8 data products (optimization scripts, server dashboards) to manage business capacity and KPIs
- Successfully saved $375,000 via data-driven sight on loan pipeline involving 7 departments, 8+ managers, 100k data points

Artworks Analyst Intern   Jun 2020 – Aug 2020
Christie's Auctions & Private Sales | New York, NY
- Analyzed numerical data of 12 artworks; provide price estimates and price-growing ("maturing the art") strategies
- Succeeded in 3 sales of collections (net value $19.5M) and contributing to establishing TAMs category (AI art, NFTs)

EDUCATION

University of Illinois – Springfield | Springfield, IL
BA, Mathematics, minor in Political Science   Expected May 2024
- **Expected Courses:**
- **Math**: Advanced Linear Algebra, Statistical Inference, Probability Theory, Statistical Modeling (ML)
- **Political Science:** Intro to American Law, Intro to Political Philosophy, AI and Society

Foothill Community College | Los Altos, CA
Non-Degree, Mathematics   Apr 2021 – Dec 2022
- **Self-Paced Courses:** Linear Algebra, Statistics, Discrete Mathematics, Multivariate Calculus

Stanford University | Stanford, CA
Non-Degree   Sep 2022 – Dec 2022
- **Courses**: Introduction to AI Alignment (AGI Safety Fundamentals equivalent)

Self-Taught | Local
Non-Degree, Mathematics and Computer Science   May 2021 – Aug 2022
- **Sources:** YouTube, TowardsDataScience.com, Kaggle

University of Pennsylvania | Philadelphia, PA
BA, Philosophy and Art History   Graduated May 2021

SKILLS & FLUENCIES

- **Spoken Languages**:   Mandarin Chinese (Fluent), Taiwanese Hokkein (Native), Spanish (Elementary)
- **Technical Languages**:   Python: OOP & Functional | HTML/CSS/JS | APIs | Git
- **Machine Learning**:   Python: SKLearn, Keras, Numpy, Scipy | Statsmodel | Tensorflow (G. Collab)
- **Analytics/Visualization**:   Python: Pandas, Matplotlib, Seaborn | Tableau | Excel/VBA
- **Database, Cloud, DevOps**:   SQL | NoSQL | Apache Hadoop/Spark | Github Pages | AWS

HOBBIES

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