

# CHRISTOPHER DENQ

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## EDUCATION

<b>University of Illinois Springfield</b> <i>Bachelor of Arts in Mathematics, Minor in Political Science</i> <ul style="list-style-type: none"><li><b>Course:</b> Linear Algebra, Probability Theory, Statistical Inference, Mathematical Statistics, Operations Research Methodologies, Differential Equations, Probability Compute and Modeling</li></ul>	Springfield, IL (Remote) Jan 2023 – May 2025
<b>Stanford University, School of Engineering</b> <i>Incoming Visiting Graduate Student (SCPD)</i> <ul style="list-style-type: none"><li><b>Course:</b> Computer Organization &amp; Systems, Operating Systems Principles</li></ul>	Stanford, CA (Remote) Sep 2023 – Dec 2023, Apr 2023 – Jun 2023
<b>Northern Virginia Community College</b> <i>Visiting Student</i> <ul style="list-style-type: none"><li><b>Course:</b> Intro to Public Speaking</li></ul>	Fairfax, VA (Remote) Jan 2023 – May 2023
<b>Stanford University</b> <i>Visiting Student</i> <ul style="list-style-type: none"><li><b>Course:</b> Intro to AI Alignment (AGI-SF equivalent)</li></ul>	Stanford, CA (Remote) Sep 2022 – Dec 2022
<b>Foothill Community College</b> <i>Visiting Student, Mathematics</i> <ul style="list-style-type: none"><li><b>Honors:</b> Foothill Business Innovation Challenge (\$500 for full-stack ML web app prototype)</li><li><b>Course:</b> Multivariate Calculus, Elementary Statistics, Discrete Mathematics</li></ul>	Los Altos Hills, CA (Remote) Apr 2022 – Dec 2022 2022
<b>University of Pennsylvania</b> <i>Certificate in Data Analytics and Visualization</i>	Philadelphia, PA (Remote) Sep 2021 – Mar 2022
<b>University of Pennsylvania</b> <i>BA in Philosophy, Specialization in Humanistic Philosophy</i> <i>BA in History of Art</i> <i>Candidate BS in Economics, Concentration in Statistics (Wharton)</i> <ul style="list-style-type: none"><li><b>Honors:</b> John C. Parker Fellowship (\$500 for statistical game theory research in board game scenarios)</li><li>Note: Changed from Statistics to Philosophy half-way through undergraduate career</li></ul>	Philadelphia, PA Aug 2018 – May 2021 Aug 2015 – May 2021 Aug 2016 – May 2018 2016
<b>Van Nuys Senior High</b> <i>Highly Gifted Math and Science Magnet</i> <ul style="list-style-type: none"><li><b>Honors:</b> <i>summa cum laude</i>, ranking 3/582</li></ul>	Van Nuys, CA Aug 2011 – Jun 2015

## RESEARCH EXPERIENCE

<b>AI Technical Standards Researcher</b> <i>AI Safety Camp (AISC)</i> <ul style="list-style-type: none"><li>Supervised by Dr. Koen Holtman, Dutch representative on the Europa technical standards committee (EU CEN-CENELEC JTC21 Committee); part of AI Safety Camp (AISC 2023)</li><li>Assisted with developing shovel-ready technical policies for EU AI Act's standardization requests</li><li>Developed minimally acceptable best practices for AI risk management at government level</li></ul>	Netherlands (Remote) Mar 2023 – Jul 2023
<b>Stanford AI Governance Research Intern</b> <i>Stanford AI Alignment's SPAR, Stanford University</i> <ul style="list-style-type: none"><li>Advised by Robi Rahman (Stanford Center for Human-Centered AI); part of Stanford AI Alignment's Supervised Program for Alignment Research (SPAR 2023)</li><li>Analyzed historical AI metrics (parameter, compute, dataset) across 31 countries to verify regional forecasting trends and inform governance strategies</li></ul>	Stanford, CA (Remote) Jan 2023 – Mar 2023

**Cambridge Machine Learning Fellow***Cambridge AI Safety Hub's MLAB, Cambridge University*

Cambridge, England (Remote)

Jan 2023

- Selected fellow for Cambridge AI Safety Hub's CaMLAB program (Winter 2023)
- 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***EA@Berkeley Group's GFI, UC Berkeley*

Berkeley, CA (Remote)

Dec 2022 – Jan 2023

- Advised by Mauricio Baker (contract GovAI) and Aris Richardson (SERI MATS); part of EA @ Berkeley's Good Futures Initiative (GFI 2022-2023)
- 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 Student Assistant***AI-x Group, California State University: Northridge*

Northridge, CA (Remote)

Nov 2021 – May 2022

- 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 Machine Learning Research Assistant***Systems Biology Laboratory, University of Florida*

Gainesville, FL

Jun 2012 – Sep 2013

- Assisted professor Su-Shing Chen and jointly published paper on biomarkers and their role in predicting Alzheimer's Disease based on dependence and gender
- Compiled, organized, analyzed over 10,000 returning results per test; provided general documentation and proofreading support
- Succeeded in contributing to the development of algorithmic application using machine-learning and SVM-based feature selection methodology

**WORK EXPERIENCE****Adobe Digital Academy***Data Scientist Apprentice*

New York, NY (Remote)

Mar 2023 – Jun 2023

- Selected scholarship finalist (1.6% admittance) for Adobe x General Assembly's Data Science Immersive program
- Fast-tracked interview for data science position with Adobe

**PNC Financial Services Group***Summer Data Analyst Intern*

Brecksville, OH (Remote)

Jun 2022 – Aug 2022

- Creates insightful data products for mid-upper management of 5+ teams to monitor team performance, health, risk, and capacity
- Takes initiative in scaling and automation by introducing Python and ML/AI solutions to enhance standard SQL process
- Successfully contributed 6 live dashboards used by 10+ managers and 80+ team members across 2 departments

**2U – Trilogy Education Services***Program Teaching Assistant*

Atlanta, GA (Remote)

Jun 2022 – Aug 2022

- Tutors 5-7 students on weekly basis; accumulated 60+ hours in teaching Fullstack Development and Data Analytics curriculum
- Successfully performs code reviews, provides feedback on projects, and teaches code to 13 students spread across 8 bootcamps

**Wyzant.com***Freelance Computer Science Tutor*

Various (Remote)

Sep 2021 – Present

- Taught computer science topics to 25+ high school, college, and adult learners for total 65+ hours ranging from coding fundamentals to advanced data structures and algorithms to machine learning topics
- Succeeded in adapting teaching style, clearly communicating abstract computer science concepts, mentoring students

**Kings Court English College House, University of Pennsylvania***Chair of Manager Board*

Philadelphia, PA

Aug 2017 – Mar 2020

- Managed team of 11 other managers, leads weekly meetings, liaisons for 3 student staff groups
- Led 14-16 annual house initiatives, 12 study break events for 450+ students, 5 residential programs
- Succeeded in 20% increased student engagement (30.7 from 25.6), 12% increased event quality ratings (4.4/5 from 3.9/5), 3 new event traditions, and 2 new in-house management strategies over 4 years

**Oasis Commissary (Non-Profit) & Mirage Lounge, University of Pennsylvania**

Philadelphia, PA

*Founder and Executive Business Operations Manager*

Sep 2016 – Mar 2020

- Wrote proposal to turn unused dormitory space into non-profit commissary, obtained vendor license from Philadelphia city
- Managed 21 staff and 2 junior managers, \$2000 bi-monthly budget, 6 marketing campaigns, 2 training programs
- Maintained in-house lounge (Mirage Lounge): hosted 5 semesterly arts & crafts/relaxation/enviro-conscious programs
- Succeeded in serving local college dorm for 3 years: \$1300 gross (returned to Penn), 22k purchases, 180 unique clients

**Christie's Auctions & Private Sales**

New York, NY (Remote)

*Summer Intern / Student*

Jun 2020 – Aug 2020

- Attended over 3+ onsite auctions and hilling meetings; helped client communication
- Contributed to 6+ condition reports, appraisals, and clients' collection package documentations
- Succeeded in helping Christie's adjust to accelerated digital marketplace and understanding of role as auction house during pandemic

**Kapp Kapp Gallery**

New York, NY &amp; Philadelphia, PA

*Winter Gallery Intern*

Dec 2019 – Mar 2020

- Trained, operated in 3-person team; staffed to real collector engagements as intern
- Assisted in establishing Philadelphia branch; performed daily operations that benefitted both branch
- Researched 16 artworks in 3 collections over 2 locations, contributed to 2 winter catalogs

**Arthur Ross Gallery**

Philadelphia, PA

*Fall and Spring Docent*

Sep 2019 – Mar 2020

- Learned gallery material, docent etiquette, and general operations of collegiate gallery
- Led 4 tours for Jaume Plensa's Talking Continent exhibition
- Led 6 tours for Helen Frankenthaler's Frankenthaler on Paper exhibition
- Succeeded in conveying abstract artistic concepts, engaged over 65+ visitors across 10 tours, and gained 20+ new email subscribers

**Fulphil**

Philadelphia, PA

*Summer Business Administration Intern*

Jun 2019 – Aug 2019

- Operated in 3 of startup's departments: Marketing, Social Outreach, Development
- Reviewed startup budget and programming price points
- Engaged 12 high school entrepreneurs as part of Fulphil's Social Impact Business Kickstarter program
- Succeeded in maintaining general day-to-day operations and completing the Social Impact Business Program

**Philadelphia Museum of Art**

Philadelphia, PA

*Spring Museum Acquisition Student/Intern*

Jan 2019 – May 2019

- Worked directly with Dr. Darielle Mason, Stella Kramrisch Curator of Indian and Himalayan Art
- Academically investigated curation/exhibition of Philadelphia Museum of Art's own collections
- Participated in Asia Week @ New York, 7 different auctions and galleries, researched 2 potential acquisition pieces

**McKinsey & Company**

New York, NY

*Summer Business Analyst Intern*

Jun 2018 – Aug 2018

- Trained, operated in 4-person team; staffed to real client engagement as an intern
- Analyzed 12+ databases, assisted in building 4+ iterations of financial models, created 3 drafts and final risk assessment reports, completed 2 presentations to team and client
- Succeeded in learning about client's situation and conducting relevant research, providing deliverables to client with team, sanitizing and adding new insights to internal PD documentation

**Kings Court English College House, University of Pennsylvania**

Philadelphia, PA

*Summer Business Development Intern*

Jun 2017 – Aug 2017

- Wrote and presented 1 grant proposal to Penn College House Committee to convert under-utilized building space into commissary for in-house students
- Worked on developing budget, securing industry equipment (shelves, coolers, cashiers), inventory sales patterns, staff training regiment
- Succeeded in pilot summer, successful enough to be reclaimed by Penn, promoted to Executive Business Operations Manager

**Bo-Ren Construction Company***Summer Real Estate Consulting Apprenticeship*

Kaohsiung City, Taiwan

May 2016 – Aug 2016

- Learned introductory to advanced real estate concepts, including 4 recent Taiwanese case studies
- Performed market research, financial analysis, and data analysis on over 400k housing data points to generate product program and positioning recommendations for 6 city projects totaling \$200M+ in development
- Wrote 4 drafts and final reports, presented results to 15+ audience members of mixed seniority
- Succeeded in learning about real estate concepts and applying market and financial research to data-informed consulting projects

**California State University, Northridge***Spring CSI Class Data Intern and Project Facilitator*

Northridge, CA

Jan 2016 – May 2016

- Worked with Dr. Wen-Chin Hsu on curriculum proposal for using a new multimedia tool in teaching introductory computer science in 3+ course sections to 120+ students
- Gathered both quantitative and qualitative data through Google forms and analyzed over 9k data points over 1 semester to best provide feedback for project transition
- Succeeded in supporting smooth integration of new teaching tool to introductory computer science classes and helping provide 6 visualizations and 10+ quantifiable metrics to academic report

**PUBLICATIONS****A diagnostic methodology for Alzheimer's disease**

Apr 2013

[https://www.researchgate.net/publication/236337563\\_A\\_diagnostic\\_methodology\\_for\\_Alzheimer's\\_disease](https://www.researchgate.net/publication/236337563_A_diagnostic_methodology_for_Alzheimer's_disease)