

# CHRISTOPHER DENQ

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## EDUCATION

### University of Pennsylvania

Philadelphia, PA

Visiting Student (Alumni Program), Mathematics and Computer Science

Expected May 2023

- **Expected Math Coursework:** Advanced Discrete Mathematics, Probability Theory, Statistical Inference
- **Expected CS Coursework:** Advanced OOP, Data Structures/Algorithms, Automata/Computability/Complexity

### Foothill Community College

Los Altos Hills, CA

Visiting Student, Mathematics and Computer Science

April 2022 – Present

- **Honors:** Foothill Business Innovation Challenge (\$500 for full-stack ML web app prototype) 2022
- **Math Coursework:** Linear Algebra, Statistics, Multivariate Calculus
- **CS Coursework:** Intermediate OOP, Cloud Computing
- **Expected Coursework:** Discrete Mathematics, Differential Equations, Computer Architecture, Symbolic Logic

### University of Pennsylvania, School of Engineering and Applied Sciences

Philadelphia, PA

Bootcamp Certificate in Data Analytics and Visualization

September 2021 – March 2022

- **Program Topics:** Machine Learning, Data Analytics, Database Engineering/Pipelines, Server Deployment, Fullstack Software Development

### University of Pennsylvania, College of Arts and Sciences

Philadelphia, PA

Bachelor of Arts in Philosophy and History of Art

August 2015 – December 2017, January 2019 – May 2021

- **Honors:** John C. Parker Fellowship (\$500 for statistical optimization on game theory model) 2016
- Note: Changed from Statistics to Philosophy half-way through undergraduate career

### Van Nuys Senior High

Van Nuys, CA

Highly Gifted Math and Science Magnet

August 2011 – June 2015

- **Honors:** *summa cum laude*, ranking 3/582

## WORK EXPERIENCE

### PNC Financial Services Group

Harrisburg, PA

Summer Data Analyst Intern

June 2022 – August 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

Atlanta, GA

Program Teaching Assistant

June 2022 – August 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

### California State University: Northridge, College of Engineering and Computer Science

Northridge, CA

Machine Learning Research Assistant

November 2021 – May 2022

- Researched graduate-level machine learning material, created 280+ class slides, 10+ Java-to-Python examples to demonstrate ML concepts, assisted in general class material preparation, proofreading, documentation
- Succeeded in collaborating, designing, and coding for graduate-level ML course curriculum with Professor Wen-chin Hsu

### Wyzant.com

Various

Freelance Computer Science Tutor

September 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**

Philadelphia, PA

*Chair of Manager Board*

August 2017 – March 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*

September 2016 – March 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

*Summer Intern / Student*

June 2020 – August 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*

December 2019 – March 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*

September 2019 – March 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*

June 2019 – August 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*

January 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*

June 2018 – August 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*

June 2017 – August 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**

Kaohsiung City, Taiwan

*Summer Real Estate Consulting Apprenticeship*

May 2016 – August 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**

Northridge, CA

*Spring CSI Class Data Intern and Project Facilitator*

January 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

**University of Florida, Systems Biology Laboratory**

Gainesville, FL

*Assistant Data Analyst and Researcher*

June 2012 – September 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

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

April 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)