

CHRISTOPHER DENQ

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SUMMARY

Experience with full-stack software development, database engineering, machine learning, and data analytics. Unique background in **art market** confers drive to **understand topics holistically**, strong prioritization of **product sense**, and ample work-experience on **diverse teams**. **Avid self-learner** and **serial project-builder** who strives to constantly grow, **empower others**, and add value to the community.

EDUCATION

Self-Taught & Continued Education | Fairfax, VA

- **Foothill College Courses:** Intermediate OOP Programming, Cloud Computing, Statistics, Multivariate Calculus Apr 2022 – Aug 2022
- **Foothill College Incubator:** Business Innovation Challenge for Social Impact (\$500; risk prediction ML prototype) Apr 2022 – Jun 2022
- **Self-guided Textbook:** *Fundamentals of Machine Learning for Predictive Analytics* by Kelleher, Namee, D'Arcy Nov 2021 – May 2022

University of Pennsylvania, 2U – Trilogy Education | Philadelphia, PA

Bootcamp Certificate in Data Analytics and Visualization

Sep 2021 – Mar 2022

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

University of Pennsylvania, College of Arts and Sciences | Philadelphia, PA

Bachelor of Arts, Double Major in Philosophy and Art History

Aug 2015 – May 2021

- **Honors:** John C. Parker Fellowship, 2016 (\$500 for game theory research in game model)

SELECTED PROJECTS

Full-Stack Machine Learning Web-App: Mushroom Edibility Predictor

Mar 2022

Python (SKLearn, Flask, Matplotlib), HTML/CSS/JS

github.com/cdenq/mushroom-edibility-predictor-web-app

- Full-stack web app that utilized mushroom data to predict edibility of mushrooms with user inputted features
- Trained 7 ML models on 60k+ data points to predict its edibility to within 80-99% accuracy, created 8 EDA graphs

Full-Stack Interactive Web Dashboard: Market Metrics on Video Game Industry

Jan 2022

Python (BS4, Flask, Matplotlib), MongoDB, HTML/CSS/JS (Plotly, Leaflet)

github.com/cdenq/web-dashboard-of-video-game-industry

- Full-stack web app that scraped market metrics on the video game industry and dynamically visualizes based on user input
- Analyzed 10k data points, maintained 5 MongoDB collections, created 19 visualizations

Coding Challenge Meta Repo: Advent of Code 2021, Google Foobar, HackerRank, SQLPad.io

Dec 2021 – Present

Python, SQL

github.com/cdenq/my-meta-coding-repo

- Jupyter notebooks detailing brainstorming process, solution implementation, and runtime analysis for major coding platforms and events

RELEVANT EXPERIENCE

PNC Financial Services Group | Data Analyst Intern | Harrisburg, PA

Jun 2022 – Aug 2022

- Contributes to 4+ internal PNC teams across 6 software and data projects to metricize, optimize, and forecast team performance
- Takes initiative in scaling-and-automation by introducing Python software prototypes to predominantly SQL-driven team
- Attends meetings to understand data requirements, writes efficient SQL to query on-scale, and automates generation of Tableau dashboards

2U – Trilogy Education Services | Fullstack Teaching Assistant | Atlanta, Georgia

May 2022 – Aug 2022

- Tutors 5-7 students on weekly basis; accumulated 30+ 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 | Machine Learning Research Assistant (Internship) | Northridge, CA

Nov 2021 – May 2022

- Researched graduate-level ML material, edited/created 280+ class slides, 10+ Java-to-Python code conversion samples
- **Succeeded** in collaborating, designing, and coding for graduate-level ML course curriculum with Professor Wen-chin Hsu

Wyzant.com | AP Computer Science Instructor | Online

Sep 2021 – May 2022

- Tutored 25+ students from high school to adult learners for 65+ hours; topics range from AP Computer Science to Intro. ML
- **Succeeded** in adapting teaching style, clearly communicating abstract computer science concepts, and mentoring students

Christie's Auctions & Private Sales | Gallery Intern/Student | New York, NY

Jun 2020 – Aug 2020

- Contributed to 6+ reports, appraisals, and collection package documentation; attended 3+ onsite auctions, hilling meetings
- **Succeeded** in helping Christie's adjust to accelerated digital marketplace and understand its market role amidst pandemic

Oasis Commissary @ UPenn (Non-Profit) | Founder | Philadelphia, PA

Sep 2016 – Mar 2020

- Started non-profit to address local community issue in dorm; wrote grant proposal to Dean, obtained vendor license from Philadelphia city
- Start-up succeeded and absorbed by Penn University; managed 21 staff, 2 managers, \$2000 bi-monthly budget, 6 marketing campaigns
- **Succeeded** in initiating own business development education, serving college dorm 3 years: \$1300 gross, 22k purchases, 180 unique clients

SKILLS AND FRAMEWORKS

- **Languages:** Python (OOP), Java, SQL (PostgreSQL), NoSQL (MongoDB), HTML/CSS/JS, Git
- **Libraries/Frameworks:** SQLAlchemy, Pymongo, Flask, Jinja, APIs, web-scraping
- **DevOps & Cloud:** Microsoft Azure, Docker, Github Pages, Google Collab, Google GCP, Amazon AWS
- **Peripheral Technologies:** Machine Learning (SKLearn, Hadoop), Data Viz (Tableau, Excel/VBA, Microsoft Office Products)

HOBBIES

Resource-Management Boardgames • Escape Room ("Record Runs") • Esports Coaching (Paladins), Peak Top 35 GM – NA