

# CHRISTOPHER DENQ

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

## SUMMARY

Experience with big data analytics, machine learning, database engineering, and full-stack software development. 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

**Foothill College** | Los Altos Hills, CA

*Associates of Science in Mathematics and Computer Science*

Apr 2022 – Sep 2022

- **Honors:** Business Innovation Challenge, 2022 (\$500 for risk prediction ML prototype)
- **Course Topics:** Statistics/Probability, Multivariate Calculus, OOP Programming, Cloud Computing

**Self-Taught** | Fairfax, VA

*Fundamentals of Machine Learning for Predictive Analytics* by Kelleher, Namee, D'Arcy

Nov 2021 – May 2022

**University of Pennsylvania** | Philadelphia, PA

*Bootcamp Certificate in Data Analytics and Visualization*

Sep 2021 – Mar 2022

*Bachelor of Arts, Double Major in Philosophy and Art History*

Aug 2015 – May 2021

- **Honors:** John C. Parker Fellowship, 2016 (\$500 for statistical research in game theory model)
- **Course Topics:** Machine Learning, Data Analytics, Database Engineering/Pipelines, Server Deployment, Fullstack Software Development

## 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](https://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

**Tableau Story:** Bike Sharing Business Dashboard

Feb 2022

*Tableau, Tableau Server*

[github.com/cdenq/bike-sharing-tableau-dashboard](https://github.com/cdenq/bike-sharing-tableau-dashboard)

- Analyzed 650k data points over 12 month period for CitiBike; created 7 pages and 11 graphs/visualizations

**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](https://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

## 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 (Non-Profit)**, University of Pennsylvania | *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, APIs, Git
- **Machine Learning:** SKLearn, Keras, TensorFlow, PyTorch, Scipy, web-scraping
- **Cloud & DevOps:** Google GCP, Google Collab, Hadoop/Spark, Docker, Github Pages, AWS, Microsoft Azure
- **Visualization Tools:** Tableau, Google Sheets/Apps Script, Google Suite, Excel/VBA, Python (Matplotlib, Seaborn)

## HOBBIES

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