

Transition into Data Science

Stella Haejun Oh

FSPA Career Seminar

4/1/26



About Me

Timeline

May 2018 - University of Rochester, BS in Physics and Applied Math

August 2025 - University of Cincinnati, PhD in Physics

December 2025 - University of Cincinnati, PostDoc

January 2026 - Senior Associate Data Scientist, J. P. Morgan Chase

Physics PhD - NOvA

My thesis consisted of two major parts:

1. Sterile neutrino analysis

- a. Poisson likelihood and Gaussian multivariate statistical methods to measure the likelihood of NOvA detecting sterile neutrinos
- b. Learned skills: statistics, C++, project management

2. Convolutional Neural Network (CNN)

- a. Sparse CNN as alternative to dense CNN to reduce computational cost and time.
- b. Reduced computational cost by $\sim 83\%$ and reduced wall-time by $\sim 10\%$ per epoch training.
- c. Learned skills: python, pytorch, machine learning, CNNs, hyperparameter tuning

Transition

Erdos Institute

- Data Science boot camp specifically designed to help Ph.D. students learn about DS and its application.
- \$500 enrollment fee. Can be waived if partnered with your institution.
- Fall, Spring, Summer semesters. 3 - 4 month programs.
- Part 1: Lectures, problem sessions, and math hours (6 hours a week)
- Part 2: GitHub project with cohorts (group of 2-5), with assigned mentor.
- Once project is completed with all deliverables, certificates given.
- Part 3 (optional): intensive DS technical interview prep
- Additional resources: 1-on-1 career advisor, career seminars, job board, alum seminars, other boot camps (quant finance, quantum computing, deep learning, UX, etc)

SQL for Data Analysis Certificate

Basic/Advanced techniques for SQL data analysis.

Took me 3 months to complete, ~1-2 hours a week.

Lots of practice problems, quizzes, and project at the end of the course.

Highly recommend this or any other SQL courses.

Data scientists and analyst use SQL then run analysis on that dataset.

Interviews

AMEND - Data Scientist

Based in Cincinnati Ohio, referred by AMEND employee

Small consulting firm using ML/AI/BI tools to help other businesses in Cincinnati to improve their business profits and efficiency

Interview 1: Interview with HR, vibe check

Interview 2: Interview with company partner, data engineer

Interview 3: Interview with data scientist lead

Didn't get an offer. Company had other visions.

Boeing - Data Analyst

#1 aerospace company in the US. Based in St. Louis, MO. No referral. Applied through LinkedIn

HR interview questions answered via email.

Interview 1: Give a 15 min presentation about my proudest project. Interviewed with the hiring manager and two other employees in the team. Each took turn asking questions and follow-up questions. Took the full hour.

Got an offer 1 week after. Should have negotiated more. DA is considered entry level position. PhD should be given senior associate level.

J.P. Morgan Chase - Sr Associate Data Scientist

Global financial services holding company and largest bank in the US. Based in Chicago, IL. No referral. Applied through LinkedIn.

No HR interview.

Interview 1: Hiring manager. General questions and two situational questions. Thought provoking, creative ideas encouraged.

Interview 2: Technical coding interview. Two SQL prompts to code. One python exploratory data analysis question. 30 minutes total.

Got an offer on 12/29/25. Negotiated for 15% more. Accepted the offer. Start date 1/20/26.

Industry: JPMORGAN CHASE & Co.

J.P. Morgan Chase

Leading global financial services firm

Largest bank in the US

\$3.9 trillion in assets

J.P. Morgan & Co. and Chase
Manhattan Corp merger in 2000.

JPMorganChase

J.P.Morgan

Serving prominent
corporations, governments
and institutional investors.

CHASE 

Serving customers
through consumer
and commercial banking.

Four LOB (Line of Business)

1. Asset & Wealth Management
2. Commercial & Investment Banking
3. Consumer & Community Banking
4. Technology



CIB F&BM COS AA

Commercial & Investment Bank LOB

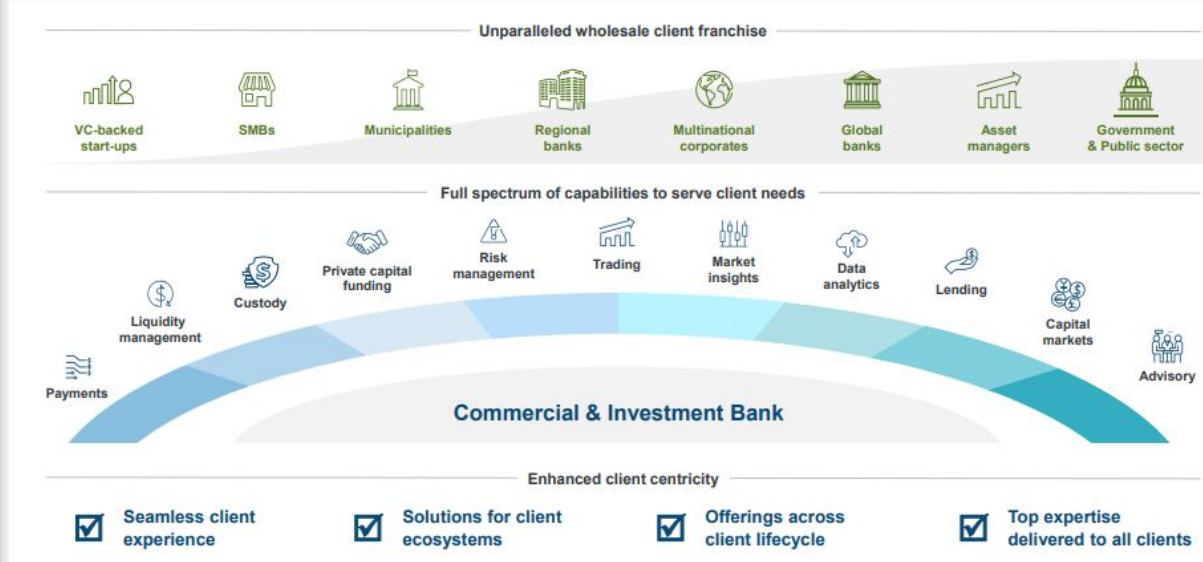
Finance & Business Management

Client Onboarding & Services Org

Advanced Analytics Team

Serving the organization with ML/AI solutions for efficiency and fast turnaround.

AI chatbots, LLM summarizer, Prediction, classification, etc.



Final General Tips

- Do not use LaTeX to write your resume. Use word.
- Take advantage of your 2nd and 3rd connections on LinkedIn.
- Apply widely. Apply to 10 jobs a week.
- Have a general resume and use catered resume for dream jobs.
- First impression is everything.
- Record yourself answering mock interview questions until it becomes second nature.
- Having soft skills is just as important as hard skills.
- Always negotiate your first offer.
- Obviously, there are always more courses and skills you can always learn but what's important is that you master the ones you already have and you can show and communicate it.
- Even if you don't know how to answer an interview question, relate it back to what you already do know and how you have experience in that. Turn the question around.

Thanks!

Contact me:

[LinkedIn](#)

Email: haejun.oh@jpmchase.com

