

Bryant Duong

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EDUCATION

Masters in Computer and Information Technology

January 2023 - Present

University of Pennsylvania

Philadelphia, PA

- Relevant Coursework: Algorithms, Statistics for Data Science (in-progress), Imaging Informatics (in-progress)
- Cumulative GPA: 3.83/4.0

Masters in Business Administration

September 2020 - June 2022

The University of California, Davis

Davis, CA

- Cumulative GPA: 3.83/4.0

Bachelor of Arts in Cognitive Science

August 2015 – December 2018

The University of California, Berkeley

Berkeley, CA

RESEARCH EXPERIENCE

The Wistar Institute

December 2023 – Present

Research Assistant – Bioinformatics

Philadelphia, PA

PI: Noam Auslander

- Assisted in running preprocessing scripts on iRAE patient data to predict peptide bindings to MHC Type I and II molecules.
- Currently working on a machine learning project relating to cancer multi-omics data.

National Library of Medicine, National Institutes of Health

June 2023 – August 2023

Research Intern – Computational Biology

Bethesda, MD

PI: Zhiyong Lu; Mentor: Qingyu Chen

- Pretrained BERT language model for domain specificity on clinical case notes and biomedical literature to capture patient representation
- Conducted independent quantitative experiments on downstream language model tasks to compare baseline model with finetuned models using Tensorflow and Pytorch

INDUSTRY EXPERIENCE

Senior Software Engineer/Software Engineer/Associate Software Engineer

January 2019 – Present

UnitedHealth Group (Optum)

Phoenix, AZ (Remote)

- Applying exploratory data analysis techniques, data cleaning methods, and natural language processing techniques to better represent over 100,000 IT support ticket issues
- Maintained and developed production instance of Apache Airflow using Python to automate the scheduling of our production and non-production pipelines, consisting of over 80,000 jobs written as Windows batch, Linux shell scripts, and IBM Mainframe JCL
- Helped implement a metadata driven application to improve the productivity of data engineers, scientists and analysts by providing a cross-platform interactive data dictionary using Neo4J, React, and Python.
- Delegated daily tasks to 10 junior engineers in an Agile workflow and gave feedback for technical presentations to senior leadership

Metadata Analyst

June 2015 - March 2018

National Security Agency

Fort Meade, MD

- Designed and developed a metadata extraction module for digital communication protocols
- Performed analysis on a wide variety of raw traffic to query database results effectively
- Won a Stokes Educational Scholarship, a full-ride award for students with skills critical to the NSA

PRESENTATIONS

Summer Poster Day, National Institutes of Health, *Foundation Language Models to Capture Patient Representation* August 2023

LEADERSHIP & EXTRACURRICULAR

Interviewer/Mentor - Technology Development Program

January 2019 – Present

UnitedHealth Group (Optum)

Phoenix, AZ

- Led four consecutive teams of undergraduate summer interns that modernized existing data pipelines and file processing applications
- Conducted over 50 interviews for undergraduate and graduate-level new hire software engineer candidates

STEMx Tutor

August 2021 – July 2022

Encorps

Los Angeles, CA

- STEM tutor teaching math to dedicated students for 2-3 hours a week in underprivileged schools in Los Angeles

AWARDS AND HONORS

Regents' and Chancellor's Scholarship

2015 - 2018

Stokes Educational Scholarship

2015 - 2018

PROFESSIONAL SKILLS

Programming Languages – Python, C/C++, Java, R, SQL

Machine Learning – scikit-learn, Pytorch, Tensorflow, Huggingface

CI/CD & DevOps - Kubernetes, Google Cloud, Docker, Jenkins, Postgres, Slurm, High Performance Computing

Miscellaneous – Agile Management, Mentorship/Management, LaTeX