



EDUCATION:

Hunter College, City University of New York

Master of Arts in Computer Science – GPA: 4.0

Awarded January 2023

Thesis: [Towards an Unsupervised Bayesian Network Pipeline for Explainable Prediction, Decision Making and Discovery](#)

Bachelor of Arts in Computer Science – *Summa Cum Laude*, GPA: 4.0

Awarded June 2020

Honors: Salutatorian, Departmental Honors, Dean's List (2018, Fall 2019), Hyman & Bertha Kuras Graduate Scholarship

Fordham University, Fordham College at Lincoln Center and Graduate School of Arts and Sciences, New York, New York

Master of Arts in History, Concentration: Late Modern European History

Awarded August 2014

Bachelor of Arts in History, minor in Political Science – *In Cursu Honorum, Magna Cum Laude*

Awarded May 2013

Honors: F.C.L.C. Honors Program, Phi Beta Kappa, Departmental Honors, F.C.L.C. Dean's List, Fordham Dean's Scholarship



EXPERIENCE:

Adjunct Lecturer, Hunter College, CUNY, New York, New York

8/2023 – 12/2023

- Taught computer science minor capstone course, and recitations for discrete math and an introductory software course using C++

Graduate Research Assistant, Research Foundation CUNY, New York, New York

5/2021 – 12/2022

- Developed a Bayesian network-based pipeline in R to predict and prevent preterm birth, as a member of the [DAIR Lab](#)
- Contributed to papers on [preeclampsia prediction](#) and [dataset preparation](#); part of winning team for a [NICHD Data Challenge](#)

Software Engineer Intern, Geopipe, New York, New York

1/2020 – 8/2020

- Engineered and trained deep learning models in Keras and TensorFlow for detecting a category of “roof clutter and street furniture”
- Implemented novel loss functions and visualizations for contending with class imbalance
- Developed Python scripts for generation and review of image datasets

Lab Member, Computer Vision and Graphics Laboratory, Hunter College, New York, New York

6/2019 – 8/2021

- Created object detection systems in Python with the OpenCV library, for use on the lab robot, running ROS on Ubuntu

College Assistant, Department of Computer Science, Hunter College, New York, New York

8/2018 – 5/2019

- Supported discrete mathematics students: assisted with recitations, proctored exams, graded assignments; tutored

Paralegal, McLaughlin & Stern, LLP, New York, New York

4/2015 – 10/2017

- Managed lifecycle of legal documents; conducted research, sensitive inventories, and data analysis projects for employment cases



PROJECTS:

- [Cyclistic Bike-Share Analysis](#) (Google Data Analytics Course Capstone), in R using tidyverse packages: September 2023
 - Performed a full process in R notebook (data cleaning, analysis and visualization) to develop business recommendations
- [Easy21](#), in Python implemented from scratch: February 2023
 - Solution to David Silver's Easy21 reinforcement learning assignment with environment, control algorithms and plotting
- [Modeling and Simulation course final project](#), team of 2, in Python using the Mesa package: December 2022
 - Agent-based simulation of outdoor cats to estimate population and behavioral statistics, featuring real time visualization
- [FeudalAI \(AI course project\)](#), team of 2, in Python implemented from scratch: April-May 2022
 - Feudal board game as a terminal application, with a script for trialing AI agents and viewing game replays
 - Local- and tree-search based gameplay agents, particularly Monte Carlo Tree Search with parallelized, truncated payouts
- [Computational Vision course final project](#), team of 3, in Python using the OpenCV package: May 2020
 - Implemented a stereo reconstruction algorithm for dense reconstruction of road surfaces, evaluated on KITTI stereo data



SKILLS & CERTIFICATIONS:

- Python and R (strong); C and C++ (intermediate); SQL (PostgreSQL) and Haskell (basic)
- Experience with computer vision, NLP, ML and robotics libraries: OpenCV, Trax, Pandas, Scikit-Learn, Keras, TensorFlow, ROS
- Proficient in Object Oriented (OOP) and Functional (FP) Programming; basic experience in parallel programming in C with MPI
- Capable with Unix-based systems (Linux and macOS), Git, Jupyter Notebook, Microsoft Excel, Google Sheets and Tableau
- Basic experience with Docker and Amazon Web Services (AWS) (EC2, S3)
- Certifications: Google Data Analytics Specialization; DeepLearning.AI Natural Language Processing Specialization