NEEL JAIN njain17@umd.edu

#### **EDUCATION**

Computer Science PhD Student

2021 - Present

University of Maryland, College Park

College Park, MD

- GPA: 3.75; Current Advisor: Dr. Tom Goldstein
- Selected Graduate Classes: Foundations of Deep Learning; Advanced Numerical Optimization; How and Why Artificial Intelligence Answers Questions

## B.A, Honors in Mathematics

2015 - 2019

Williams College

Williamstown, MA

- Thesis: Expanding Zero-forcing to Multi-color Forcing in Graphs
- Sigma Xi Honors Society; Dean's List last two years; Varsity Men's Squash

## **EMPLOYMENT**

Teaching Assistant, University of Maryland, College Park Introduction to Data Science, Professor John Dickerson and Jose Calderon September 2021 - Present Williams College, Williamstown, MA

Data Scientist Senior Consultant, Booz Allen Hamilton

July 2020 - April 2021

Strategic Innovation Group, Analytics

Washington, DC

- Led efforts to create math models such as agent-based models and simulations like Monte Carlo in python and excel for various different analyses and studies including program evaluations for DoD OSD CAPE
- Built a Flask webapp using HTML, CSS, and JS to display various analyses of a curated dataset

Data Scientist Consultant, Booz Allen Hamilton

July 2019 - July 2020

Strategic Innovation Group, Analytics

Washington, DC

- Built an end-to-end audio analysis pipeline for an app in Dart/Flutter using Tensorflow
- Helped build a data pipeline from google trends to a S3 bucket via a cron job for COVID-19 data lake

Summer Games Internship, Booz Allen Hamilton

June 2018 - August 2018

Strategic Innovation Group, Analytics

Washington, DC

Analyzed spatial data through QGIS's python script runner to create shapefiles for the RShiny front-end

Teaching Assistant, Williams College

September 2016 - December 2016

Introduction to Mechanics, Professor William Wootters

Williams College, Williamstown, MA

## RESEARCH EXPERIENCE

Thesis, Williams College Graph Theory, Pamela Harris September 2018 - May 2019

Williamstown, MA

Research Intern, Salk Institute For Biological Studies

Computational Biology, Edward Stites Lab

May 2017 - August 2017

San Diego, CA

#### **PUBLICATIONS**

Multi-color Forcing in Graphs; Graphs and Combinatorics

June 2020

# LEADERSHIP, CERTIFICATIONS, and AWARDS

Outstanding Graduate Teaching Assistant Award Recipient

January 2021

Dean's and Chair's Fellowship

September 2021

Introduction of Quantum Computing Certificate, MIT xPRO

April 2020 February 2020

Foundations of Natural Language Processing Certificate, NVIDIA

December 2019

Foundations of Computer Vision Certificate, NVIDIA

October 2019

Minority Student Athlete Advisory Committee, Gaius C. Bolin Chapter, Williams College

Quantum Algorithms for Cybersecurity, Chemistry, and Optimization Certificate, MIT xPRO

2018-2019

# SELECTED SOFTWARE LANGUAGES/TOOLS/LIBRARIES

Python; Pytorch; Pandas; Numpy; Scikit-Learn; NLTK; Spacy; Tensorflow; Keras; Docker; Java