# **Efthimios Vlahos**

## **EDUCATION AND HONORS**

## SUNY Stony Brook University, Applied Mathematics and Statistics

September 2021- Present day

Masters in Computational and Applied Mathematics

- Cumulative GPA: 3.425/4.0
- Pursuing Advanced Certificate in Data & Computational Science
- Relevant Coursework: Numerical Analysis I II and III, Applied Linear Algebra, Differential Equations & Boundary Value Problems I and II, Probability and Statistics for Data Scientists, Machine Learning

#### **CUNY Hunter College, Physics and Mathematics**

September 2016- August 2020

Honors Bachelor of Science in both Physics and Mathematics

- Cumulative GPA: 3.6/4.0
- Related Coursework: Intermediate Mechanics, Intermediate Electricity and Magnetism, Electronics, Thermodynamics, Quantum Mechanics

# **Some Personal Projects**

# **Netflix Data Analysis (Python):**

September 2021

- Imported data set from Kaggle from Netflix to understand five key points: 1) What content is available on its platform 2) The similarities between the content 3) The network between actors and directors 4) What exactly Netflix is focusing on 5) Sentiment analysis of content available on Netflix
- Created various data visualizations such as distribution of content ratings on Netflix, top five directors/actors with respect to content, trend of content produced over the years on Netflix, and sentiment of content on Netflix

#### **Student Performance Analysis with Machine Learning (Python):**

November 2021

- Evaluated the performances of a set of students using machine learning techniques
- Created various data visualizations comparing math score vs reading/writing score, reading score vs writing/math score, scores vs parental education and etc. to see if there are any relationships between students' performance with respect to various variables
- Split data set into training and test sets while applying principal components analysis, logistic regression, and completed various statistical analyses

#### Skills

- Programming Languages: Python, R, SQL, Excel, Java, Scala, HIVE, AWS C, C++, JavaScript, HTML, CSS
- **Big Data & Machine Learning:** Tableau, Spark, Pytorch, Hadoop, MongoDB, (eg. scikit-learn, numpy, pandas, matplotlib, Seaborn),
- Data Science & Miscellaneous Technologies: A/B testing, ETL, Data science pipeline (cleansing, wrangling, visualization, modeling, interpretation), Statistics, Time series, Experimental design, Hypothesis testing, OOP, OOD, APIs, Excel, Git

### **Work History**

#### Independent – East Meadow, NY

Tutor, 06/2020 - Present day

- Collaborated with students to complete homework assignments, identify lagging skills and correct weaknesses
- · Planned lessons for allotted time to strengthen weak subjects and build skills

Maintained detailed files and created charts tracking students learning progress

# Capital One – Bethpage, NY

Teller, 01/2016 - 08/2019

- · Answered customer inquiries regarding account balances, transaction history, services charges and interest rates
- Educated customers on use of banking website and mobile apps
- · Assisted customers with setting up or closing accounts, completing loan applications and signing up for new services