### Education

## Georgia Institute of Technology

Master of Science in Computer Science

University of Maryland

Bachelor of Science in Information Science

Aug. 2023 - Dec. 2024

Atlanta, Georgia

Aug. 2016 – May 2020

College Park, Maryland

#### Relevant Coursework

• Data Structures

• Deep Learning

• Computer Vision

• Visual Analytics

• Data Science

• Database Modeling

• Machine Learning

Natural Language

• Web Applications

• Cloud Computing

## Experience

#### Turner & Townsend AMCL

Technical Consultant - Data Engineering & Analytics

New York City, NY

Apr. 2022 - Jun. 2023

- Independently created ETL pipeline & deployed dynamic dashboards as a one-stop-shop product improving NYC Housing Authority's \$3.1M asset management capabilities affecting 116,000 residents.
- Incorporated scripts using Python, PL-SQL and PowerBI DAX for designing statistical metrics to track real time asset outage, performance & cost, generating valuable insights.
- Utilized BS4, Scikit-learn, Pandas and MongoDB to automate real time scraping of precipitation information & IBM Maximo data to predict impacts and cluster asset condition information into similarity groups.

## University of Maryland

Aug. 2019 - May 2020

Research Assistant

College Park, Maryland

- Assisted in development of an analytics engine playable case study at University of Maryland's HCI Lab with Dr. Elizabeth Bonsignore and Dr. Phil Piety, funded by the National Science Foundation.
- Worked with Python REST API, HTML/CSS, JavaScript & MySQL to devise a learning analytics system integrating it to the University's AWS cloud infrastructure.
- Collaborated with BYU university using Git version control and presented research on game mechanics & data collection.

 $\mathbf{Intel} \qquad \qquad \mathbf{May} \ \mathbf{2019} - \mathbf{Aug.} \ \mathbf{2019}$ 

Analytics Intern - eSports

Singapore

- Presented analytical insights to formulate a data-centric strategy for Intel Extreme Masters Sydney 2020, aiming to expand its engagement with the 40 million eSports audience in the Asia Pacific region.
- Utilized Python, Twitch API and PowerBI to scrape, analyze and visualize data from the APAC eSports industry.
- Collaborated with UX and marketing teams of APJ and ANZ to audit the digital marketing content of Intel products on 13 specialty accounts for A/B testing via HTML/CSS, JavaScript and SEO strategies.

### **Projects**

# $\textbf{Project Tidal Web App} \mid \textit{JavaScript, Python, MongoDB, Node.js}$

Feb. 2024

- $\bullet$  Awarded overall winner at Georgia Tech Hackathon amongst 1100+ participants.
- Developed a real time site identification tool for tidal energy to enhance wave energy adoption and reduce emissions.
- Utilized geospatial computation and analytics to revolutionize energy economics, forecasting tidal power as a key to curbing rising energy costs and emissions.

#### Inter-Language Font Style Transfer | PyTorch, OpenCV, CycleGAN, Pix2Pix

Dec. 2023

- Developed a computer vision based model to translate visual text within the real world and other media, preserving the original style, color, and font of the text.
- The inspiration comes from watching anime and noticing untranslated environmental text such as billboards limiting immersion. This model was developed to bridge that gap enabling complete text accessibility.
- Utilized GAN models like Pix2Pix and CycleGAN for style transfer between Japanese and English characters, achieving seamless integration into the original media.

#### DataCleaner | Pandas, NumPy Sk-Learn, SciPy, Seaborn

Oct. 2024

- Developed an easy to use data pre-processing tool for automated Data Cleaning & Interestingness based Pruning in ML.
- Published a research paper that elaborates on its capabilities in managing missing data, outliers, and encoding features.

#### Technical Skills

Languages: Python, JavaScript, SQL, HTML/CSS

Developer Tools: VS Code, PowerBI, Tableau, AWS Athena, Microsoft Azure ML, Spark

Technologies/Frameworks: Pandas, PyTorch, REST, Git, Numpy, tensorflow, Scikit-Learn, MongoDB, Flask, OpenCV