AKHILA ASHOKAN

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EDUCATION

University of Illinois at Urbana-Champaign   August 2020 – May 2022
Master of Science in Computer Science

Vanderbilt University   August 2015 – May 2019
Bachelor of Science in Computer Science

PROFESSIONAL EXPERIENCE

Teaching Assistant | University of Illinois at Urbana-Champaign | Urbana-Champaign, Illinois   August 2020 – Present

- Selected as teaching assistant for introductory computer science class (CS 125/CS 124) in Fall 2020, Spring 2021, and Fall 2021
- Led weekly homework review sessions, quiz reviews, and office hours
- Created lesson plans for CS 199 "Even More Practice" sessions and held weekly practice sessions with students

Software Engineering Intern | Capital One | Richmond, Virginia   June 2021 – August 2021

- Collaborated in team of four interns to build customer facing platform for the card payment fraud line of business
- Integrated internal and external API calls to deliver custom product within a 3-month time frame
- Deployed final product in cloud environment and demoed product to senior leaders and management

Data Analyst II | Data Analyst | GEODIS | Brentwood, TN   August 2019 – August 2021

- Implemented machine learning models using Python to analyze customer data and provide insights to operations leaders
- Utilized Keras to conduct proof of concept that predicted inventory failure points based on SKU data and reduced costs associated with inventory control by $1.5 million
- Built time-series models using Facebook Prophet to improve warehouse forecasting by 22% compared to existing models

Data Science Intern | GEODIS | Brentwood, TN   January 2019 – August 2019

- Integrated Airflow and MLflow into testing and production environments to create stable workflows and measure model performance metrics
- Evaluated cloud technologies and communicated results and conclusions to senior executives and decision makers

Intern | Vanderbilt University Institute of Imaging Science | Nashville, TN   February 2017 – June 2018

- Integrated an image processing toolbox in MATLAB to analyze fMRI images to determine language laterization in epilepsy patients using non-invasive methods
- <u>Publication</u>: A. Ashokan, V. L. Morgan*, Vanderbilt University, TN "Resting Function Connectivity Across a Language Network Not Related to Task Based Language Laterality Index", The International Society for Magnetic Resonance in Medicine (ISMRM), ISMRM-ESMRMB, Paris, June 2018.

Intern | Vanderbilt University Medical Center (VUMC) | Nashville, TN   June 2015 – July 2015, June 2016 – July 2016

- Modelled cost effectiveness of genotyping patients prior to administering drugs with hypersensitivity risks
- Presented and published results at American Medical Informatics Association (AMIA) Fall Symposium
- <u>Publication:</u> Ashokan, J. F. Peterson, Vanderbilt University, TN "Preemptive HLA Genotyping of HIV Patients for Personalized Medicine", American Medical Informatics Association (AMIA) Fall Symposium, Washington D.C., November 2014.

PROJECT HIGHLIGHTS

Exploring the Senses and Emotions and Their Interconnections Throughout Literary Periods   August 2021 – Present

- Explored sensory blending in fiction literature across various literary periods using word and phrase-level embeddings
- To be presented at the Society for Affective Sciences (SAS) conference in March 2022

Machine Learning and Deep Learning Models to Predict Stroke Risk   January 2019 – May 2019

- Collaborated with team to identify stroke patients using nontraditional methods and longitudinal medical health records
- Developed machine learning algorithms in Python with accuracy of 72.4% and a false negative rate of 59.0% and authored research paper analyzing each model's metrics following IEEE guidelines

TECHNICAL SKILLS

Software Languages and Version Control: Python, Java, Kotlin, SQL, C++, HTML/CSS, Git
Machine Learning Tools and Libraries: Apache Airflow, MLflow, Facebook Prophet, scikit-learn