Vivek Vaidya

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EDUCATION

University of Illinois at Urbana-Champaign - Spring 2020

B.S. Computer Science + Linguistics | Certificate in Information Accessibility, Design & Policy

Involvement: Director, CS @ ILLINOIS Sail • Corporate Chair, Association for Computing Machinery

Committee Chair, Reflections | Projections • Member, Women in Computer Science

Coursework: Freshman Honors in CS, Software Design Studio, Statistical Analysis, Discrete Structures, Data Structures, Computer Architecture, Systems Programming, Computational Linguistics, Applied ML

Languages: Python, R, Java, Scala, C, C++, Swift, Javascript, SQL, Golang, HTML/CSS, Latex

Tools, Technologies: Kafka, Spark, Hadoop, Pandas, Numpy, Flask, Tensorflow, React.js, Node.js, Express, AWS Redshift, Athena, Lambda, API Gateway

EXPERIENCE

Software Development Engineer Intern, Amazon.com - Seattle, WA

MAY 2018 - AUG 2018

- Architected and built a self-service tool for BI and Ops teams to explore historical seller risk evaluation data
- Dropped critical metrics access time by 91%; reduced cost of compliance for the business
- Used Python, SQL, Pandas, Matplotlib, AWS Athena and Quicksight

Data Engineering Intern, Capital One - Urbana-Champaign, IL

MAY 2017 - DEC 2017

Summer 2017

- Designed and built a 4-way data pipeline to handle streams of sensitive DNS data
- Replaced legacy monitoring infrastructure with a real-time, searchable and highly scalable datastore
- Used Python, Flask, Apache Kafka, Spark, and Accumulo

Fall 2017

- Wrote Spark jobs to filter, normalize and process historical DNS & HTTP data
- Design adapted from Detection of Early Stage Enterprise Infection by Mining Large-Scale Log Data

Instructor, CS196@Illinois - Urbana-Champaign, IL

JAN 2017 - PRESENT

- Lead Instructor for Freshman Honors course taken by over 200 students & assisted by 40 staff members
- Responsibilities include teaching fundamental Python concepts, managing course infrastructure, and mentoring course staff - who supervise students' semester projects

PROJECTS & RESEARCH

staysafestayclean, an Android app that uses publicly available health data and geolocation to alert users of proximity to disease. Also works with other triggers that the user may be susceptible to

AlgoTrade, an algorithmic trading platform built in Python that uses mean reversion and linear regression to make buy/sell/hold decisions on securities. Worked on implementing the trading strategy

Ask Eliza, a voice-driven virtual psychologist that uses machine learning & the IBM Watson API to predict the sentiment of the user's voice and performs a personality analysis

Codiamat, Zachary and Vaidya, Vivek K. (2017) "Data-Driven Approach to Picking a Classification Algorithm" Written in collaboration with the Illinois Data Science Initiative and National Center for Supercomputing Applications