Ansh Roy

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EDUCATION

University of Illinois at Urbana-Champaign — Expected Graduation: May 2021
- Bachelor of Science in Computer Engineering — GPA: 3.42

EXPERIENCE

Quicket Solutions — Jan 2020 - Present
Software Engineering Intern
- Developing a parser using ANTLR to store data from official documents

GEP Worldwide — May 2019 - Aug 2019
Software Engineering Intern
- Constructed an auto mapping algorithm to map source to target columns with 90% accuracy, saving 300+ hours of manual time
- Utilized matching algorithm and string similarity algorithms
- Extracted data from Azure DataLake containing JSON data
- Designed Python scripts for flattening JSON objects into tabular structure for easy data access
- Streamlined different data sources to tabular structure and developed SQL scripts to join different tables into one

PROJECTS

Operating System Kernel
- Created basic kernel with support for a read-only filesystem, paging, interrupts, and round-robin scheduling for multiple shells.
- Contributed towards network driver with support for UDP, graphics driver with window manager, and implemented memory allocation (malloc) function.

Heat Map of Neighborhoods
- Collaborated on creating a heat map utilizing the Google Maps API of neighborhoods in Seattle based on parameters given (School, Crime, Parks)
- Systematized an algorithm to match the most parameters to user

MIT Zero Robotics International Competition
- Engineered an algorithm as a team on the maneuvering system of a satellite to move items to a desired position while using the least amount of resources possible

RELEVANT COURSEWORK

Data Structures, Introduction to Algorithms, Database Systems, Data Science, Operating Systems, Wireless IoT Lab, Digital Systems Verilog, Database Systems, Programming Languages and Compilers, Digital Signal Processing

SKILLS AND INVOLVEMENT

Student Organizations:
- Fintech@UIUC (Secretary, May 2018 - Present):
  Leading a team to synthesize a systematic trading algorithm employing data from Clinical Trials, Stock Splits, and Insider Trends to predict when and how much to buy/sell or short.

Computer Languages:
Python, C++, C, Java, MySQL, HTML, x86, JavaScript

Frameworks, Libraries and Technologies:
Apache Spark, Azure DataLake, React, Flask, Azure Databricks, Pandas, NumPy, Git, Scikit-Learn, ANTLR