Alexander J. Mulchandani

1414 Belmont St NW, Apt. 204 • Washington, DC 20009 • (202) 264-0246 • ajmulchapps@gmail.com

WORK EXPERIENCE

Applied Predictive Technologies | Arlington, VA | August 2014 – Present

Principal Data Engineer | February 2019 – Present
- Led exploratory team focused on solving emerging problems in Data Management through Python and Spark
  - Created utilities using Python to automate common processes, amounting to saving 1000+ hours/year. Utilities include a XML/JSON/Parquet parser that directly dumps data from this format into SQL Server, a tool to quickly summarize a dataset with visuals, and an automated geocoder process
- Led investigative team researching the effectiveness of shifting our servers from on-prem to Azure
  - First phase showed the effectiveness of offloading heavy workloads to designated clusters in the cloud in order to mitigate blocking resources needed by clients
- Built CI/CD pipeline using Jenkins and DbUp to allow for consistent/automated deployments across all servers
- Led the brainstorming and implementation of a standardized process for onboarding the training of 100+ global new hires, leading to a reduction of 200+ hours/year

Lead Data Engineer | August 2016 – January 2019
- Served as head data engineer across 20+ client projects with multi-million dollar contracts, effectively creating ways to manage each client's data pipeline containing several terabytes of data. Responsibilities included managing the projects, delegating to junior team members, conducting code reviews, and owning the data quality in each production environment
- Designed and built several procedures in SQL Server to automate inefficient tasks, such as moving a table to a new database to balance space
- Led team that increased Confluence usage by 60% by reorganizing/rewriting all content in a more effective fashion

Data Engineer | August 2014 – July 2016
- Owned large scale ETL pipelines to feed terabytes of data across various industries (Retail, Restaurant, Hospital, CPG, Financial Services, Grocery) into the APT platform, including the design, development, implementation, automation, and maintenance of the processes
- Identified inefficiencies in data pipelines and optimized them, leading to ETL performance gains up to 70%
- Determined data requirements and best practices for advanced data manipulations, storage, and analysis strategies

theCut App | Full Stack Software Engineer | Washington, DC | May 2018 – September 2018
- Built image generation microservice using Node.JS on an AWS Lambda that allows for users to auto-generate images based on a template and associated data, leading to increased social media posts using these auto-generated images

FREELANCE PROJECTS

Corporate Scrimmage | Washington, DC | February 2019 – Present | www.corporatescrimmage.org
- Iterated with key stakeholders to determine requirements for website that connects young student athletes with employers for short internships in order to give them exposure to opportunities outside of sports
- Sole developer of website that uses Node.JS, Express, EJS, MongoDB, and S3; Deployed using AWS EB

TECHNICAL SKILLS

Programming Languages: SQL | Python | AWS | Spark | JS | MongoDB | Node.JS | Swift (iOS framework) | HTML

COMMUNITY INVOLVEMENT

The Pivot Group | Washington, DC | 2018 – Present
- Technical lead of team focused on opening young athletes' minds to opportunities outside of sports

UVa SIEDS | Charlottesville, VA | 2016 – Present
- Served on a panel of judges responsible for evaluating and providing feedback on the capstone projects of undergraduate/graduate Systems Engineering students

HackCville | Charlottesville, VA | 2014 – 2017
- Mentored students in developing their entrepreneurial ventures and ideas, providing both guidance on refining their ideas and how to overcome their technical challenges and support for their post-graduation employment efforts

School for the Deaf | Mumbai, India | 2009 – 2015
- Taught economically and physically disadvantaged children Math, Science, Computer Skills, English and Fine Arts to improve their personal and professional outcomes

EDUCATION

University of Virginia | School of Engineering and Applied Science | May 2014 | GPA: 3.6/4.0
B.S., Double Major in Computer Science and Systems Engineering, Minor in Engineering Business