**Isaac Kerson DATA ANALYST & MACHINE LEARNING RESEARCHER**

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Data Analyst candidate skilled in advanced data analytics, ETL pipelines, and building machine learning models for decision making systems. Proficient in Python, SQL, Scikit-learn, and Keras. Experience researching and developing ML prototypes at an industry-leading master data company, implementing analytics engineering projects at a large university, and leading teams.

## **Skills**

**Advanced**: Python, SQL, Pandas, Sci-Kit Learn, Keras, Data Processing, Microsoft Office, Google Workspace, Jupyter Notebooks.

**Proficient**: Matplotlib, Seaborn, Plotly, Pyspark, MongoDB, PostgreSQL, Git, GitHub, Bash command line, VSCode, Azure.

**Expert**: Education, Written & Verbal Communication, Public Speaking, Data Analysis, Data Science.

## **Recent Projects**

Consumer Electronics Classification:

IT Ticketing Time Prediction: Created a deep learning model to predict service ticket completion time using system logs. Achieved a 50% gain in accuracy over baseline Random Forest Regressor model.

Auto Shop Database: Built a Content Management System using PostgreSQL database and Flask with a team of four.

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## **Recent Experience**

STIBO SYSTEMS Højbjerg, Denmark

***Lead Data Analytics Engineer*** August 2022 – Present

Lead a team of three in researching and creating a synthetic data generation system and distributed random forest classification model for consumer electronics master data. Acceved 97% accuracy on validation data set. Presented findings to company management using Seaborn, Matplotlib, and PowerPoint. Handed off research to the internal data science team and saw our methodology incorporated into the company's master data management product.

GACHON UNIVERSITY Seoul, South Korea

***Learning Analytics Team Lead & Assistant Professor*** January 2011 – September 2021

Implemented, organized and led multiple Learning Analytics projects for the university's Global Language Center. Developed Python scripts for Google Classroom API calls for automated creation of classes, homework assignments, and announcements. Built and maintained end-to-end student grade management system in Google Sheets for importing student data, automatically ingesting assignment grades, flagging struggling students, calculating class-wide performance statistics and visualizualizating results in summary dashboard. Created a live, interactive, in-class activity tracking system by integrating student smartphones, Google Sheets, and Google Forms. The system provided students instant feedback on their learning and allowed teachers to adjust their lessons and instructional approach in real time. Trained colleagues as well as led product maintenance improvement over a ten-year period.

UNIVERSITY NEIGHBORHOOD MIDDLE SCHOOL New York, USA

***Grade Team Lead & English Language Arts Teacher*** July 2007 – July 2009

Worked on a teacher-lead team to design and implement a real-time student attendance system using Google Sheets. Led seventh grade team in reviewing student academic, behavioral, and attendance data to plan student interventions and curriculum improvements. Received formal Letter of Accommodation from Principal for accomplishments as team lead.

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## **Education & Certificates**

GEORGIA INSTITUTE OF TECHNOLOGY, ***Master of Science in Analytics*** December 2022

NEW YORK UNIVERSITY, ***Master of Education*** May 2007

GEORGE MASON UNIVERSITY, ***Bachelor of Arts in English Language*** January 2001

IBM, ***DevOps and Software Engineering Certification*** Current

MONGODB, ***MongoDB for Python Developers Certification*** January 2022

DATACAMP, ***Python Data Science Certification*** July 2021

GOOGLE, ***IT Automation with Python Certification*** July 2020