

HYUN SUK RYOO (MAX RYOO)

Software Engineer and Data Scientist

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EDUCATION

M.S. Data Science (4.0) (Part Time)

University of Virginia - current

B.A. Computer Science (3.7) & B.A. Statistics (Biostatistics Concentration) (3.6)

University of Virginia - Class of 2020

EXPERIENCE

Software Engineer II

Microsoft (Azure Resource Graph)

Jun 2022 - Current

Atlanta, Georgia

- Develop ETL data pipeline for Azure Resource Graph.
- Perform data analytics from the data collected to provide more information.

Senior Associate Software Engineer

Capital One (Center For Machine Learning & Anti Money Laundering)

Capital One (Data Storage and Consumption - BI Tools)

Aug 2020 - Current

McLean, Virginia

- Develop a belief propagation algorithm with Scala using graph database to determine risk scores of each bank customer to prevent money laundry.
- Develop a full stack application for clients to use to research outputs of above project.
- Develop a python package to create custom pptx/websites from plots and data ETL process in databricks
- Develop an ETL pipeline to extract usage metrics for various AWS resources being used by the company
- Served as a tech lead to develop a pipeline to pull from various database sources to mine large amounts of data to be available for many different downstream applications.
- Technologies Used: Scala, Spark, Pyspark, Python, Gremlin, Neptune, React, Flask, AWS, Quicksight, PostgreSQL, databricks

Junior Software Developer

Thinking with Tools, LLC

Dec 2019 - Aug 2020

Charlottesville, Virginia

- Work together with a team to make new features and maintain data for a web application. Make a mobile/web-app with one codebase.
- Technologies Used: Ionic, Angular, Coldfusion, JavaScript, MS SQL Server, Postgress

Software Engineer Intern

Fannie Mae (Capital Markets Treasury CASH TMS L3 Team)

Jun 2019 - Aug 2019 (3 Months)

Herndon, Virginia

- Developed a end to end Dashboard that tracks all Fannie Mae wire payments. The dashboard keeps tracks an average of net \$13 Trillion wire transactions a year.
- Automated the Deployment Processes of Applications to one click deployment
- Developed a REST API for Calendar Date Services and ID Services
- Technologies Used: Spring, MS SQL Server, Oracle, Java, Python, Maven, HTML/CSS, JavaScript

Data Science Contractor / Database Developer Intern

S.W.I.F.T. (Innovation Lab / Database Development)

Jun 2018 - May 2019

Manassas, Virginia

- Developed a REST API for filtering and updating Security Violation logs. Continued to work on this project as a Data Science Contractor incorporating Data Science techniques.
- Technologies used: Node js, Express js, MongoDB, SQLite3, Python, HTML/CSS, Docker

SKILLS

Certifications

AWS Solutions Architect Associate (SAA-CO2)

Backend

Scala Python Java C++ R SQL

Gremlin PHP JavaScript ColdFusion

DevOps

EC2 ECS CloudFront S3 Lambda

Route53 IAM Docker

Front End

Angular React Node/Express JS Spring

Ionic Flask HTML/CSS/JS TypeScript

Libraries/Packages

Spark Hadoop Pyspark Scikit-learn

Tensor Flow Keras Tidyverse Numpy/Pandas

npm Maven Tableau SAS

Databases

Neptune DyanmoDB PostgreSQL Mongo DB

MS SQL Server MySQL SQLite3 Oracle

OS

Unix/Linux Windows

Languages

English Korean

PERSONAL DEVELOPMENT PROJECTS

Founder / Lead Developer

GAON Solutions

Dec 2020 - Current Ashburn, Virginia

- Main Developer for <https://gaonsolutions.com/home>

Lead Developer

CLASS Analytics

Dec 2020 - Current South Korea

- Developed a full stack application to create automatically generated tests and lesson modules for instructors to use in their online teaching classes.
- Developed an automatic scoring system based on psychometric analysis
- <https://class-analytics.com/home>