

HYUN SUK RYOO (MAX RYOO)

Machine Learning Engineer

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github.com/hyunsukr

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

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 is integrated into the Capital Markets Treasury CASH TMS L3 Team. The dashboard keeps tracks an average of net \$13 Trillion wire transactions a year. The dashboard makes it easier for employees to track problematic wires and see transactions easier on a day to day basis.
- 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. The API filters out Security Violations from k thousand line files to 100 lines. Original time of completion (x hours or days) is now minutes. 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

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>