HYUN SUK RYOO (MAX RYOO)

Programmer and Data Scientist

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EDUCATION

B.A. in Computer Science (GPA: 3.7)
University of Virginia
📅 Aug 2016 – May 2020

Relevant Courses: Machine Learning (CS 4774/4501), Database Systems (CS 4750), Artificial Intelligence (CS 4710), Programming Languages for Web Applications (CS 4640), Algorithms (CS 4102), Computer Architecture (CS 3330), Program and Data Representations (CS 2150), Software Development Methods (CS 2110), Discrete Mathematics (CS 2102), Introduction to Programming (CS 1113), Intro to Data Science with Python (STAT 1559)

B.A. in Statistics (Biostatistics Concentration) (GPA: 3.6)
University of Virginia
📅 Aug 2016 – May 2020

Relevant Courses: Statistical Machine Learning (STAT 5630), Data Visualization and Presentation (STAT 4310), Data Analysis with Python (STAT 3250), Introduction to Regression Analysis (STAT 3220), Elementary Linear Algebra (MATH 3351), Introduction to Probability (MATH 3100), From Data to Knowledge (STAT 3080), Introduction to Statistical Analysis (STAT 2120), Intro to Biology (BIOL 2100 & 2200), Intro to Data Science with Python (STAT 1559)

EXPERIENCE

Software Engineer Intern
Fannie Mae (Capital Markets Treasury CASH TMS L3 Team)
📅 Jun 2019 – Aug 2019 (3 Months)   📍 Herndon, Virginia

- Project: 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.
- Technologies Used: Spring, MS SQL Server, Oracle, Java, Maven, HTML/CSS, JavaScript

Data Science Contractor / Database Developer Intern
S.W.I.F.T. (Innovation Lab / Database Development)
📅 Jun 2018 – May 2019 (1 Year)   📍 Manassas, Virginia

- Project: 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. Made a database to contain all updates and reports of security violations so that no data is lost. 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

Teaching Assistant CS 4750 (Database Systems)
University of Virginia
📅 Aug 2018 – May 2019 (10 Months)   📍 Computer Science Department

- Teaching Assistant: Was a teaching assistant for CS 4750 Database Systems for two semesters. The class introduces fundamental concepts for design and development of database systems.

RESEARCH

Interests: Machine Learning, Model Analysis, Quantitative Methods

Data Engineer
Measure of Cognitive Ability Research
📅 May 2019 - Present   📍 USC & UVA

- Developed a Web-server and Web-application to maintain and process data from Measure of Cognitive Ability (MOCA) tests. The purpose of this research project is to develop a measure of cognitive ability and its scale of cognitive ability.
- Technologies Used: AWS, Wordpress, MySQL, Python, Scikit-learn, R, Tidyverse
- Principal Investigator: Ji Hoon Ryoo

Undergraduate Research Assitant
Auditory Neurobiology Lab at UVA
📅 Sept 2014 - Dec 2017   📍 UVA

- Worked with classifying new protiens and DNA sequences that can be a lead cause of deafness in old age hearing loss
- Supervisor: Jung-bum Shin

SKILLS

Programming Languages

Python | Java | JavaScript | TypeScript | C++/C
R | SAS | SQL | PHP | LATEX | x86 | Docker

Frameworks

Node/Express JS | Spring Framework | Angular

Libraries/Packages

Scikit-learn | Tensor Flow | Keras | AWS | Maven
Tableau | Mathematica

Databases

Oracle | MS SQL Server | Mongo DB | MySQL
Sqlite3

OS

Unix/Linux | Windows

IDE

Eclipse | Intelliji | Anaconda | Jupyter Notebook
Vim/Emacs | Visual Studio Code
All Microsoft Office Suite

Languages

English | Korean

PROJECTS

Full-Stack
KSEA at University of Virginia
- https://hyunsuk-ryoo.com/ksea

Web-developer
Saban Research Institute of C.H.L.A
- https://hyunsuk-ryoo.com/uscconsultation

Hackathon
Swift Company Hackathon
- Source Code: https://github.com/hyunsukr/SwiftEats
- Description: http://www.hyunsuk-ryoo.com/swifteats

Full-Stack
UVA CS 4640
- Source Code: https://github.com/hyunsukr/DeCo

LEADERSHIP/EXTRA CURRICULAR

KSEA Vice President   May 2018 – Present
KSA Outreach Chair   Jun 2017– May 2018
Madison House Volunteer   Sep 2013– May 2018