

Ritwik Dutta

[linkedin.com/in/ritwikduttausa/](https://www.linkedin.com/in/ritwikduttausa/)

ritzymail@gmail.com

Summary

- Experienced in full-stack software development.
- University of Massachusetts Amherst, Class of 2020, BS in Mathematics, Minor in CS
 - Degree Concentrated in Statistics and Applied Math

Skills

- Programming Python, Java, C/C++, PostgreSQL, Redis
- Data Science Tableau, Splunk, Matlab, NumPy, SciPy, Spark, JupyterHub
- Web Development HTML/CSS, JavaScript, jQuery, Bootstrap, Flask, Vue, REST design
- IDEs/VCS Visual Studio, Git, Eclipse, IntelliJ, PyCharm
- Deep Learning Keras, Tensorflow

Professional Experience

Apple	apple.com	Jul 2020 - Present	<i>Languages used:</i> Python, Scala
		May - Aug. 2019	
		May - Sept. 2018	
		May - Sept. 2017	
<ul style="list-style-type: none">• Machine Learning Engineer for DMLI• <i>Data Science Intern:</i> Worked in the Siri Advanced Development Group and created a streamlined system for analyzing machine learning data and collecting metrics to be used for ML model improvements.• <i>Software Engineering Intern:</i> Created a platform for analysis of hardware data, visualization of key information, and collection & collation of data from various internal sources to provide a centralized, easy-to-access data store.• <i>Software Engineering Intern:</i> Created a visualization dashboard to highlight software quality and test status across company-wide projects.			

Nod Labs	nod.com	May - Aug. 2016	<i>Languages used:</i> C++, WinAPI, Python
<ul style="list-style-type: none">• Extended Nod's robotic testing platform for Virtual Reality tracking sensors by adding variable-speed movement and recorded motion playback.• Created C++ plugins that allowed product extensibility to the OSVR and Unreal platforms using the DirectX and Unreal Engine standard libraries.• Presented work to executive management of partner company.			

Lytmus

lytmus.io

Oct. 2015 - Jan. 2015

Languages used:
Python, JS, SQL, Java

- Tested a virtual-machine based platform that allowed applicants to demonstrate their knowledge of algorithms and proficiency in multiple programming languages to potential employers.
- Solved test problems and analyzed their effectiveness to help increase test quality.

Academic Research

Carnegie Mellon University

Summer 2015

Analyzed IEEE Xplore citation data to determine fairness of scientific collaboration networks in academic conferences.

Paper: <http://ritwikd.com/assets/pdf/cmupaper.pdf>

Georgia Institute of Technology

Summer 2014

Developed a smart-home sensor-based monitoring and database infrastructure for long-term care of patients with disabilities.

Paper: <http://ritwikd.com/assets/pdf/gtconf.pdf>

Software: <https://github.com/ritwikd/gt-dashboard>

Relevant Coursework

Discrete Math

Statistics I & II

Multivariable Calculus I & II

Differential Equations

Linear Algebra I & II

Numerical Methods

Computational Probability

Group Theory

Mathematical Modeling

Functional Programming

Computer Architecture

Intro to Data Structures and Algorithms

Algorithms II

Technical Writing

Introduction to Linear Regression

Statistical Computing

Projects

- PiMuPhi Real-time audio visualization with RGB lighting. [GitHub](#)
- SummonBot Reddit scanner to notify users when mentioned. [GitHub](#)
- K.A.R.E. GitHub recommendation engine. [GitHub](#)

Personal

- American citizen, native English speaker.
- Bay Area native