

David Li

301-799-8981 · david@davidl.me
Gaithersburg, Maryland

EDUCATION

University of Maryland, College Park

Sep. 2015 - Dec. 2018

B.S in Computer Science and Mathematics (Statistics)

Magna Cum Laude, GPA: 3.98

EXPERIENCE

UMD Graphics and Visual Informatics Laboratory

May 2018 - Dec. 2018

Undergraduate Research Assistant

- Co-developed Geollery, a mixed reality social media platform featuring real-time user interaction.
- Developed real-time 3D reconstruction pipelines with two levels of details from Google Street View, OpenStreetMaps, and Google Maps.
- Incorporated Twitter and Yelp APIs to visualize geotagged social media.
- Wrote GLSL, JavaScript, MySQL, and PHP code using libraries three.js for 3D development and Ratchet for WebSockets in PHP

UMD Department of Mathematics

Sep. 2017 - Dec. 2017

Grader for MATH410 Advanced Calculus I

- Assessed and provided feedback on mathematical proofs from homeworks and quizzes.

UMD First-Year Innovation & Research Experience

Jan. 2017 - May 2017

Academic Peer Mentor for FIRE170 Phillips Virtual Culture

- Mentored FIRE students

UMD First-Year Innovation & Research Experience

Jan. 2016 - Dec. 2016

FIRE Student and Summer Fellow in Sustainability Analytics

- Analyzed FAO and IUCN Red List data sets using R and summarized research insights.
- Used the rvest package to automate data collection from sources without public APIs.

COURSE PROJECTS

Machine Learning: Implemented and evaluated the performance of decision trees, k-nearest neighbors, perceptron, PCA, and a fully-connected neural network in Python.

Data Structures: Designed a hierarchical navigation back-end using variations of AVL binary tree and PM Quadtree data structures in Java. (MeeshQuest)

Computer Networks: Developed a application for overlay routing using link state routing and implemented commands such as *ping*, *traceroute*, and *sendmsg* with dynamic packet-splitting in Ruby.

TECHNICAL SKILLS

Projects: <https://github.com/dli7319>

Favorite Programming Languages: Java, Kotlin, Ruby, R

Preferred Web Development Stack: JavaScript, PHP, MySQL

Familiar Frameworks and Libraries: three.js, Laravel, Unity