

Kyle Rood

Email: krOOD20@gwmail.gwu.edu
Cell: (774) 320-0423
Github: <https://github.com/krOOD20>

2422 I Street NW
Washington, D.C. 20037
Website: <https://krOOD20.github.io/website/>

EDUCATION

The George Washington University, School of Engineering and Applied Science, Washington D.C. **May 2020**
Bachelor of Science in Computer Science; Minor: Sustainability
Masters in Computer Science, Concentration in Artificial Intelligence **May 2021**
Relevant Courses: Machine Learning, Android Programming, Operating Systems, Databases, Embedded Systems, Algorithms and Data Structures, AR/VR Development, Software Engineering, Computer Architecture, Physics I and II
GPA: 3.7

TECHNICAL SKILLS

Programming Languages: Python (Flask, Pandas, Matplotlib, Keras, Tensorflow, Scikit-Learn, PIL and Pillow)
Java, C, HTML, SQL, MongoDB, React, Java Spring, PHP, PostgreSQL, Kotlin, Angular
Programs: Linux, AWS (Lambda, APIs, Sumerian), BitBucket/GitHub, Jira, Unity, AndroidStudio, Docker, Postman

TECHNICAL PROJECTS

Amber Vision (Senior Design) **Sept. 2019 - May 2020**
• Machine Learning analysis of hundreds of cameras in the DC Metro Area to find cars in specific time/place
• Web application to display real time car detections, and query functionality to look up historical results
Generic Web-Based Image Classifier **July 2018**
• Downloads images of user-specified object, trains a Keras neural network using ImageNet, outputs model for that object
• Python and Flask based pipeline to classify any object the user wants
“Dye” VR Simulator **Jan. 2020-Mar. 2020**
• Used Amazon Sumerian to Develop 3D environment to simulate playing a game of dice at my house in D.C.
DoHub, George Hacks Hackathon (1st Place Preliminary Round) **Nov. 2018**
• Volunteer Management system for Mongolian Human Trafficking Prevention non-profit called Lantuun Dohio
• Database of volunteers (PostgreSQL), web front end for scheduling/registering for events (Python/Flask/Heroku)
Registration System (Team based) **Mar. 2018-May 2018**
• Integrated and deployed database management system with PHP and HTML front end, and an SQL backend
hitMeUp **Fall 2019**
• Android (Kotlin) application using QR code scanner to add person on every one of their social media pages at once
SportStatTracker **Current**
• Python based Computer Vision system to automatically score and get statistics on different sport games

WORK EXPERIENCE

Software Engineering Fellowship *Navteca* **Jun. 2020 - Present**
• Development of Angular based scheduler for running AWS EC2 instances more efficiently with AWS Lambda and API's
• Unity based extraction of geographical metadata from Geotiff files in order to determine precise spatial information
Teaching Assistant for Intro Python Class **Sept. 2018 - Present**
• Helping students with in class exercises involving python in the context of data analytics
• Holding office hours to help students with work outside of class
Software Engineering Intern *LinkedSenior* **Feb. 2020 - June 2020**
• React and Spring based system to help nursing homes care for patients, and help patients enjoy nursing homes more
Undergraduate Machine Learning Research Assistant *GW Computer Science* **Sept. 2019 - May 2020**
• Performing water depth estimation using satellite imagery from multiple sources
• Built for DZYNE Technologies in ongoing DARPA project to assist in response to natural disasters
Software Engineering/Automation Intern *DZYNE Technologies* **June 2019 - Aug. 2019**
• Built environment to automate testing of different Computer Vision algorithms using DigitalGlobe imagery and Docker
Undergraduate Machine Learning Research Assistant, Project AMOS *GW Computer Science* **Dec. 2017 - Dec. 2018**
• Database of 3,000 cameras and over 1 billion images from all over the world to be used in Computer Vision
• Lead developer of front and back end of a website based in the Python library Flask