

# Yuhwan Lee

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## EDUCATION

### University of Maryland: College Park

College Park, MD

BSc in Computer Science and Statistics, GPA: 4.0/4.0

Aug. 2021 – May 2024 (Expected)

- Relevant Coursework: Data Structures, Algorithms, Computer Systems (C/Unix/Assembly), Discrete Mathematics, Programming Languages, Linear Algebra, Calculus I/II/III

## TECHNICAL SKILLS

**Proficient:** Python, Java, React, HTML/CSS/JS, C, Git

**Experience with:** EC2, S3, CloudFormation, Elasticsearch, Maven, OCaml, Bootstrap, Jira, Agile, Microservices

## EXPERIENCE

### Software Engineering Intern

College Park, MD

Capital One

Sept. 2022 – Dec. 2022 (Expected)

- Current Fall 2022 Software Engineering Intern for Capital One.

### Software Engineering Intern

Gaithersburg, MD

Leidos

May 2022 – Aug. 2022

- Assisted in the effort to refactor the UI from AngularJS to React by implementing new features and fixing bugs.
- Developed scripts to **transform a large (over 300GB) dataset** for a data migration effort to Elasticsearch.
- Refactored Java microservices to read from and write to Elasticsearch instead of a SOLR database.
- Removed outdated and unsecure instances of slf4j from a Maven project to remediate log4j vulnerabilities.

## PROJECTS

### Tutoring Request Manager | Python, Webhooks, Amazon S3, Discord API

- Proposed and developed a Discord bot to manage incoming tutoring requests for Centennial High School's National Math Honor Society (NMHS), allowing NMHS members to respond to and accept tutoring requests.
- Implemented webhooks with Google Forms to receive data in real time, storing request data by utilizing AWS S3.
- **Utilized by over 50 student/tutors** throughout the pandemic, allowing for a smooth continuation of tutoring.

### Social Media Posting Bot | Amazon EC2, Facebook Graph API, Twitter API, Reddit API, Python

- Created a program to take the top trending posts from Reddit and post them onto various social media platforms.
- Integrated the Reddit API to download images and videos, and used Facebook's and Twitter's APIs to post the downloaded content.
- Deployed an Amazon AWS EC2 instance to host and continuously run the program at regular intervals.
- Produced a successful Twitter account with **over 700 followers and 1 million impressions**

### MedNet | Google Cloud Firestore, Twilio API, Python

- Engineered a web application to connect hospitals with medical suppliers as part of a 4 member hackathon team.
- Constructed the Twilio-based frontend, and integrated with a Google Cloud Firestore database, storing incoming data in real time.
- Collaborated with team members to integrate fragmented source code into one cohesive application.

## EXTRA-CURRICULAR ACTIVITIES

### FTC Robotics - Lead Programmer | Java, OpenCV, TensorFlow

Sept. 2018 - May 2021

- Organized the code base with strong adherence to object oriented design principles to improve code readability.
- Designated roles and tasks to members of the programming team, reducing conflict and streamlining development.
- Qualified for **state level competitions** by achieving **11 team awards** (Inspire Award, Connect Award).

### Pyoneers - Education Committee | Python

Aug. 2020 - May 2021

- Arranged weekly presentations and programming questions for students, **reaching over 30 students** throughout the school year.
- Designed and created a Discord bot to manage and grade submissions for a countywide programming tournament with **over 50 participants**.