

# Ankur Mishra

**ALUMNI** of Thomas Jefferson High School for Science and Technology.

**FRESHMAN** at University of Maryland, College Park.

**MAJORING** in Computer Science with UMD's First-Year Innovation & Research Experience (FIRE) Program.

## SKILLS

**PROFICIENT** in Java, Python, C++, Android Development, HTML, CSS, JavaScript, NodeJS, AWS Lambda, S3, EC2

**PROFICIENT** with Git, VIM, and Emacs

**EXPERIENCE** with Windows, macOS, and Linux

## EDUCATION

2014 – 2018

Thomas Jefferson High School of Science and Technology

+ Academic Performance

- o **SAT**: 1510 (Math: 800 | Reading and Writing: 710)
- o **CUMULATIVE GPA**: 4.10
- o **JUNIOR YEAR GPA**: 4.40

+ Notable Courses

- o **POST AP** Artificial Intelligence I and II

Python based CS course where in the first semester I applied search algorithms such as A \* and Minimax to solve puzzles. The second semester I learned about neural networks, genetic algorithms, and natural language processing.

- o **POST AP** Computer Vision I and II

C++ based CS course where in the first semester, I learned about boundary detection, image filtering, and motion estimation using the OpenCV library. During the second semester of the course, we covered modern approaches based on Deep Learning.

- o **POST AP** Web and Mobile Application Development Courses

The Web Development Course covered the basics of HTML, CSS, JavaScript, NodeJS, and SQL to create complex web apps with client and server interaction and APIs.

The Mobile Development Course covered basic interfacing with XML and creating applications with intents, data storage, and using Android classes such as RecyclerViews and Fragments to display data for different sections of an application.

## EXPERIENCE

June - Aug 2018

### SOFTWARE ENGINEER INTERN @ CAPITAL ONE

At my Capital One internship, I worked on a tool that aimed to improve the quality of content found on Capital One's learning platform Tech College Hive, by checking each piece of content for metadata that either was incorrect or out of date. The application was set up on the AWS Cloud using services such as S3, Lambda, Kinesis, and EC2 for different aspects of the project. I created an AWS Lambda microservice that verified whether any link was broken or not, and setup an EC2 instance to run our frontend.

## PROJECTS

2017 – 2018

**SENIOR RESEARCH** - <https://github.com/The-Log/vizdoom-bot>

Over the course of my senior year, I researched how to optimize Deep Reinforcement Learning Training by using Computer Vision. I used the Pytorch-YOLO2 library and a Deep Q Learning Network to train an agent to play the game Doom in the ViZDoom Environment.

2017 – 2018

**TEXTMD** - [github.com/The-Log/textMD](https://github.com/The-Log/textMD)

Hackathon application aimed to bring medical tools to impoverished areas of the world, where Internet is difficult to access, by using texting. It won the Grand Prize and was the 2<sup>nd</sup> most liked Grid Data-structure at BigParser's 2017 Summer Hackathon.

2017 – 2018

**#TRENDINGINMEDICINE** - <http://trendinginmed.ml>

Project started by a couple of my friends and me during HackTJ 2017. It grabs each month's trendy words from a group of medicine journals and displays them as hashtags on a Trending Page much like Twitter.

## AWARDS

2018

**RECIPIENT** of University of Maryland President's Merit Scholarship.

2017

**GRAND PRIZE WINNER** BigParser's 2017 Summer Hackathon

2017

**SILVER DIVISION** in USA Computing Olympiad

2016

**EAGLE SCOUT** in Boy Scouts of America Troop 1530