github.com/the-log | 2018amishra@tjhsst.edu | ankur-mishra.ml

Ankur Mishra

SENIOR at Thomas Jefferson High School for Science and Technology.
ADMITTED to University of Maryland, College Park's Computer Science and First-Year Innovation & Research Experience (FIRE) Programs.
RECIPIENT of the University of Maryland President's Merit Scholarship.

SKILLS

PROFICIENT in Java, Python, C++, Android Development, HTML, CSS, JavaScript, and NodeJS
PROFICIENT with Git, VIM, and Emacs
EXPERIENCE with Windows, macOS, and Linux

EDUCATION

2014 – Present

STUDENT – Thomas Jefferson High School of Science and Technology

+ Notable Courses
  - **AP** BC Calculus
    Calculus course taught at the BC level covering derivatives, differentials, integrals, and their applications in contexts such as work, density, and testing for divergence and convergence on a series.

  - **AP** Computer Science + Data Structures
    Java based CS course in where I learned about various data structures such as Arrays, Lists, Stacks and Queues in the first semester. During the second semester, we covered sorts such as Quicksort and Mergesort, along with basic search algorithms such as Breath First Search and Depth First Search and Big-O analysis.

  - **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.

  - **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.

- **POST AP** Web and Mobile Application Development
  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.

- **HONORS** Cryptography
  Python based Math and CS course where we covered Caesar shift, monoalphabetic substitution, the Vigenere cipher, enigma, RSA public key cryptography, and digital encryption. We discussed how to use each system's vulnerabilities to decrypt messages, using techniques such as frequency analysis and cribbing.

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

PROJECTS

2017 - Present — **TEXTMD -** 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 2nd most liked Grid Data-structure at BigParser's 2017 Summer Hackathon.

2017 – Present — **#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 the Trending Page much like Twitter.

2017 — **PRICE-AGGREGATOR** - github.com/The-Log/price-aggregator
Final Project for Web Application Development that displayed prices for products from various retailers while also creating a product price history.

AWARDS

2018 — **RECIPIENT** of University of Maryland President's Merit Scholarship.
2017 — **GRAND PRIZE WINNER** BigParser's 2017 Summer Hackathon
2017 — **BRONZE MEDAL** ACTR Post-Secondary Russian Essay Contest
2017 — **SILVER DIVISION** in USA Computing Olympiad
2016 — **EAGLE SCOUT** in Boy Scouts of America Troop 1530
2016 — **SILVER MEDAL** Olympiada of Spoken Russian
2015 — **BRONZE MEDAL** ACTR Post-Secondary Russian Essay Contest
2015 — **BRONZE MEDAL** Olympiada of Spoken Russian