Nafis Ahmed

nafis.ahmed@vanderbilt.edu | +1 (615) 397-6859 | ahmednafis00.github.io
LinkedIn: www.linkedin.com/in/ahmed-nafis | GitHub: www.github.com/ahmednafis00

EDUCATION

Vanderbilt University   Nashville, Tennessee
Major: Computer Engineering (B.E.), Minor: Economics   GPA: 3.79/4.00, Graduation: May 2022

Technical skills: Java, C/C++, MATLAB, Python, Assembly Language, Linux, Git

Selected Coursework: Data Structures, Intermediate Software Design, Microcontrollers, Operating Systems, Mobile & Wireless Networks, Computer Vision, Signal Processing, Econometrics

PROFESSIONAL EXPERIENCE

Neuroimaging & Brain Dynamics Lab   Nashville, Tennessee
Undergraduate Research Assistant   May 2019 – Present
- Investigating the influence of physiological signal patterns in neural activity and their potential relationships to human cognition.
- Co-authored "From Brain to Body: Learning Breathing and Heart Rate Patterns from fMRI Dynamics" *(submitted to IPMI 2021).*
- Co-authored "fMRI-based detection of human brain alertness predicts EEG and behavioral variability" (*in revision at eLife*).

Department of EECS, Vanderbilt University   Nashville, Tennessee
Teaching Assistant, Programming and Problem Solving   August 2019 – Present
- Assisting *200* first-time programmers in the introductory Java programming course by holding weekly office hours and providing feedback on assignments and exams.

LEADERSHIP AND ACTIVITIES

Elon Online Bookstore   Dhaka, Bangladesh
Founder   June 2018 - Present
- Worked on the initial feature planning to sell books at the cheapest price in the city with free shipping.
- Monitoring the on-going operations to deliver *BDT 400,000 (USD 4,750)* worth of books every year to our *1,200+* customer base, all the while maintaining *5.00/5.00* stars for our service.
- Spearheaded customer acquisition and promotional programs that lead to *79%* growth in annual order volume.

Major League Hacking (MLH) Local Hack Day   Nashville, Tennessee
1st Place, Vanderbilt University   December 2018
- Developed the backend for a face detection attendance system using Java and Azure's REST API to count the number of students present in a classroom and prevent false attendance in TopHat.

VandyHacks   Nashville, Tennessee
Board Member, Communications and Marketing   January 2019 – December 2019
- Acted as the medium of communication between *650+* participants and the organizers to nurture cross-group collaboration and to promote the largest hackathon in the state.
- Implemented marketing strategies that resulted in the *highest turnout* for on-campus workshops.

PERSONAL PROJECTS

Gradebook | *Java, Multi-threading, TCP, Real-time Database (Firebase), Cloud Hosting (AWS)*
- Productivity app that allows students to keep track of their progress in a semester, facilitates student-instructor communication, and provides feedback on prioritizing tasks and achieving desired grades.

Pixception | *Java, Multi-threading, TCP, Image Processing, Cloud Hosting (AWS), Full-stack development*
- Photo-sharing app that lets the user share a picture with a secret message or a different picture encoded in it (steganography) that can only be decoded by the recipient with a secret code.