

Aayesha Islam

aayeshasns3113@gmail.com | +1 352 872 8334 | [linkedin.com/in/aayeshamislam](https://www.linkedin.com/in/aayeshamislam)

Education

University of Florida (UF) - Gainesville, FL

August 2021- May 2025

Bachelor of Computer Science GPA: 3.87/4.0

- **GPA:** 3.87/4.0 | **Awards:** Dean's List (Fall 2021 - Spring 2023), Pearson Edexcel High Achiever Award (2019)
- **Relevant Coursework:** Operating Systems, Intro to Software Engineering, Modeling and Animation, Data Structures and Algorithms, Discrete Structures, Computer Organization, Programming Fundamentals (Java and C++)

Skills: Java, C++, Python, Golang, SQL, HTML, Processing (Java), MATLAB, MongoDB, SFML Graphics Library, OOP, MS Excel, Scrum

Spoken Languages: English, Bengali, Urdu, Hindi, Arabic

Experience

Software Test Engineer Intern | Sandvik Mining & Rock Technology

May 2023- August 2023

- Wrote test scripts and executed test cases using REST API in Python for embedded and software simulation testing for drilling rigs
- Performed regression testing on manual and automated features, parameters, diagnostics, and functionalities in simulator and field
- Tested and resolved assigned software tickets across 3 machine versions on company-wide Application Management Software
- Participated in weekly scrum meetings for agile development sprint planning, status updates, priorities, and task assignment

Undergraduate Teaching Assistant | Paid position at the University of Florida

January 2023- Present

- Led a 60-student weekly hour discussion section for Computer Organization on computer processing, architecture, and memory
- Assisted and created course material, assignments, projects, in-class lectures, exam questions, and graded exams and assignments
- Hosted weekly 2-hour office hour sessions answered questions about ARM Programming and debugging project code

Intern | Logistics Committee | Society of Asian Scientists and Engineers (SASE)

September 2022- December 2022

- Operated event with an attendance of 250 people and budgeted for diverse food options such as vegan and gluten free within \$300
- Handled merchandise sales and performed tasks such as taking stock, deciding prices, advertising, and delivering to customers
- Audited all expenses made by committees in a spreadsheet and requested purchase orders from the SASE Bank account

Socials Chair | Association of Computer Engineers (ACE) at the University of Florida

September 2022- Present

- Organized and advertised social events catered towards CS, CPE and other STEM major students to promote networking
- Corresponded with the Treasurer to procure budgets of over \$100 for organizational events and fundraisers
- Arranged events every week with multiple organizations to facilitate diversity and teamwork

Adab Chair on Executive Board | Islam on Campus (IOC) at the University of Florida

August 2022- May 2023

- Administered event plans to ensure they are in accordance with the professional standards of Islam and the University of Florida
- Executed IOC speaker events, social and religious events with an average attendance of 150 people of diverse cultures and ethnicities
- Reviewed IOC documents, interviewed members, and reported suggestions to the general body at meetings every week

Teacher | Sunday School at the Hoda Center

September 2022- Present

- Taught 10-15 elementary age students Arabic and Islamic Studies for 5 hours every Sunday at the Hoda Center Mosque
- Coordinated with other teachers to assign and grade homework, make tests, regulate Whatsapp group, and classroom setup

Moderator | Online Programming Community at the University of Florida

June 2022- Present

- Leader in community development for a server of 1800+ students of CS classes, including Programming 1&2 and Data Structures

Research

Laser Fault Injection Vulnerability | Professor Domenic Forte | Hardware Security

August 2023- Present

- Developed a Python app to display a simulation map of faults in PG-TVD Logic cells using data from Cadence Virtuoso
- Collaborated with UF ECE department Graduate researchers to present my research every week to Professor Forte

Projects

TenWords | A Language learning Full-Stack WebApp

May 2023

- Built a web app enabling users to master 7 languages by learning 10 words daily with interactive text and audio flashcards and quizzes.
- Utilized Golang and built a REST API in the Backend, ReactJS as the Frontend, and MongoDB as the database to store 3k+ words
- Developed MongoDB database to create user authentication server, store progress in words and quizzes, and manage 3k+ data points

UniScholars | A College Discussion Forum App with GUI

January 2023

- Created a multi-purpose discussion forum App in Python using socket, tkinter, and threading to connect multiple clients to a server
- Used tkinter to display interactive GUI with welcome message, alerts when new clients join, and saved chat history

SuperDuper | A Cosmetics Dupe Finder Algorithm

November 2022

- Built a Pairing Heap and MinHeap in C++ to find affordable alternatives to expensive cosmetics from dataset of 100,000 options
- Designed program to have various cosmetics options such as makeup, skincare, and haircare and sorting ability by brand and rating
- Compared performance of Pairing Heap by analyzing time of execution and reduced search time complexity from $O(\log n)$ to $O(1)$

HodaHub | A Student Info Tracker for Hoda Sunday School

January 2022

- Assembled a custom Doubly Linked List to store information of Sunday school students to optimize element insertions and removals from linear time $O(n)$ to constant time $O(1)$
- Implemented 20+ functions to create a user-friendly API using C++, templates, pointers, and Object-Oriented Programming (OOP)