Anas Alhadi

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EDUCATION

Dalhousie University

Halifax, NS

Bachelor of Computer Science with Honours - GPA: 4.09/4.3

Jan. 2021 - May. 2025

EXPERIENCE

research Assistant
Dalhousie University

April. 2024 – May. 2025

Halifax, NS

- Worked under Dr. Samer Lahoud, an IoT networking expert on improving metadata compression in IoT packets.
- Developed the ability to efficiently grasp the contents of Documentation, RFC standards and research papers.

Undergraduate Teaching Assistant

Aug. 2023 – Dec. 2024

Dalhousie University

Halifax, NS

- Managed 400+ Git repositories incorporating the use of bash scripts in the process.
- Instructed on Systems topics including C programming, basic Computer Architecture and UNIX operations.
- Provided in-person guidance to students, ensuring clarity and comprehensiveness.

Projects

 $KeBaB \mid C++$

Aug. 2024 – Present

• Paper Title: K-mer based breaking for finding SMEMs.

Paper Code

- Collaborated with experts to implement improved algorithms used in the identification of certain patterns in the human genome.
- Assisted in the Testing and Debugging of a relativley large code base.
- Evaluated the performance of our implementation.

Dynamic Context Updating in SCHC | Python3

Jan. 2025 – Present

• Thesis Title: Dynamic Context Updating in SCHC.

Paper Code

- Completed and Defended a study on a novel, dynamic rule updating algorithm for an IoT based compression protocol (SCHC).
- Built a prototype of the implementation for the updating algorithm.
- Built an emulation testbed that was used to evaluate the performance of said algorithm.

Advanced Data Structures | GoLang, Python3

Aug. 2023 – April. 2024

• Collaborated with a classmate to implement and analyze non trivial data structures.

Contact Code

- Implemented: Splay Trees, Van Emde Boas trees.
- Evaluated performance by stress testing the Data structures and compared results against the theoretical limits.

TECHNICAL SKILLS

Languages: C, C++, Java, Python3, MySQL, GoLang, JavaScript

Developer Tools: Scapy, Git, Docker, WireShark, Makefile, GDB, RiotOS

Frameworks:: Flask, Espresso, JUnit, Nodejs

Markup Languages: LaTeX, Markdown, HTML, CSS

AWARDS

Sexton Scholar: Awarded each semester to students with a 3.85 or higher GPA on a full course load, achieved 6 times.

Dean's List: Awarded each semester to students with a term GPA between 3.4 and 3.84 while on a full course load, achieved twice.

Oman MoHE Scholarship: Awarded to the top performing highschool students in the country, includes 4 years of paid university tuition.