Haaris Waleh

San Diego, CA | haariswaleh@gmail.com | (858) 382-2105 | https://hwaleh.github.io/ | www.linkedin.com/in/haaris-waleh/

Objective

Dedicated Computer Scientist who is passionate about machine learning, programming, and helping others. Team player looking to utilize my critical thinking, technical skills, and academic aptitude to create innovative solutions and advance technology that benefits people.

Technical Skills

- **Languages/ Frameworks:** Python, PyTorch, TensorFlow, OpenAI Gym, MATLAB, R Studio, SQL, Java, C, C++, JavaScript, HTML, CSS, ARM/ x86/ MIPS Assembly, Bash Scripting, System Verilog, Jest, Cypress
- **Other:** NumPy, Pandas, Matplotlib, NLTK, Seaborn, Unix/ Linux, Git/ GitHub, VS Code, LaTex/ Overleaf, RESTful/ CRUD web services, Quartus, NodeJS, AWS, Valgrind, Google Colab, Jupyter Noterbook, Conda

Education

University of California, San Diego (UCSD). La Jolla, CA September '18- June '22

B.S. Computer Science, Minor in Business GPA: 3.4

Relevant Coursework: Data Science in Practice, Intro to ML, Intro to Security, Deep Learning, Database System Principles, Adv. Data Structures, Design and Analysis of Algorithms, Software Engineering, Principles of OS, Digital Systems, Intro to Comp. Architecture, Discrete Math, Statistical Methods, Linear Algebra, Calculus 1-3

Awards and Clubs: 6x Provost Honors, Association for Computing Machinery AI and Cyber team member

Work Experience

Machine Learning Intern. *Bourbaki Group*. Remote **June 2021-August 2021**

- Developed a machine learning tool with a team of 6 interns in **PyTorch** and **TensorFlow** on **AWS** instances that recognizes images of Organic chemical equations and predicts the results.
- Researched, tested, and adapted existing technology and literature to create new model pipeline that achieved over 90% accuracy on test data.

Software Development Intern. *Creatorsoft*. Remote **June 2020-September 2020**

- Built an application for automated accounting for large scale business use that increased efficiency and helped highlight budgeting issues.
- Programmed middle tier code in **NodeJS** including **RESTful/ CRUD** web services.
- Tested applications through testing scripts and performed quality assurance.

Projects and Extracurriculars

Article Classifier. *Personal project.* **November 2022–December 2022**

- Constructing a topic modeler using **unsupervised learning** through the **NLTK** library.
- Integrating this model into a **Python** app that classifies and groups input articles by topics.

Lead Python Developer. *Association for Computing Machinery Club project.* UCSD **April 2022-June 2022**

- Selected from 100+ applicants to implement a ML pipeline for binary image segmentation in **PyTorch**.
- Researched various ML models to compare results and determine the best approach.
- Coordinated development with a team of 4 peers on **GitHub**, including guiding and teaching team members.
- Presented project results to peers and faculty.

MNIST Digit Classification. *Personal/course project for Intro to ML*. UCSD **September 2021-December 2021**

- Programmed various ML models in **PyTorch** and **TensorFlow** for digit classification on the MNIST data set.
- Models include K-NN, uni/multi- variate Generative models, logistic regression, and neural nets (MLP and CNN).
- Extended coursework to improve accuracy and efficiency of models. Some models reached >95% accuracy on test data and training time was reduced by upwards of 50% for certain models.

Backend Developer. *Course project for Software Engineering*. UCSD **January 2021–March 2021**

- Created a Pomodoro (tomato) timer web app as part of a team of 7 using the **Agile** workflow. The app boosted personal studying efficiency by more than 30% and received a top 10% grade among peers.
- Built backend components in **HTML** and **JavaScript**; assisted design team planning in early stages.
- Tested app frontend and backend functionality through **Jest** and **Cypress**.

Youth Mentor. *Muslim American Society Youth Revive Program.* San Diego, CA **November 2017–December 2019**

- Led youth group of 10+ members by writing and presenting academic and religious lesson plans.
- Conducted logistical planning for weekly meetings and events.