

Arsalan Bin Najeeb

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EDUCATION

GEORGE WASHINGTON UNIVERSITY

M.S. Computer Science

GPA 3.7 | May 2025

KNOX COLLEGE

B.S. Computer Science &

Business & Management

Cum Laude

GPA 3.6 | Jun 2020

TECHNICAL SKILLS

PROGRAMMING

Proficient (5+ years)

Java • Python • JavaScript

Familiar

Groovy • SQL • NoSQL • Vue • React

TypeScript • Grails GORM • Rust • Php

React Native • Laravel • Django • C

HTML5 • CSS • Next.js • GraphQL

TECH STACK

AWS • Forge • Docker • WSL2 • Ubuntu

Git • Sentry • GCP • IntelliJ • EMACS

Kubernetes • VScode • Apache • \LaTeX

LINKS

LinkedIn: //arsalanwyne

Website: //arsalan.app

AWARDS

1st place Student Research | Consortium of Computing Science Colleges MW 2018

Philip Haring & John Houston Award | Promoting International Understanding

Deans Honor List

Mortar Board Member

Sigma Xi Nominee

PUBLICATIONS

- [1] M. M. McGill et al. Exploring the enacted computing curriculum in k-12 schools in south asia: Bangladesh, nepal, pakistan, and sri lanka. *Association for Computing Machinery*, 2020.

EXPERIENCE

Graduate Research Assistant | GWU

Jul 2024 - Present

- Created & Implemented custom LLVM passes for the Rust Compiler
- Designed and developed benchmarking programs in Rust to evaluate performance of popular crates such as Hyper and Tonic (Protobuf, gRPC)

LLM + AI Student Research | GWU

Jan 2024 - Present

- Investigated LLM models for discovery work in Weak to Strong Alignment
- Developed an LLM-based reward model to guide another model's outputs via reinforcement from AI feedback (RLAIF)
- Finetuned OpenAI GPT-4o, GPT-4o-mini & BERT then evaluated on SST-2
- Evaluated safety of finetuned models vs pretrained models & leveraged Weights & Biases to log our training data
- Engineered model interpretability techniques for transformer architectures
- Trained ML models locally using PyTorch & Huggingface API for multiple classification & regression tasks

Software Engineer | TWST Events (Previously CSS)

May 2021 - Aug 2023

- Repaired 2 inherited **Java** systems by initial bug fixes & system updates
- Visualized & overhauled UI for 2 **Vue** reactive front end sites while following OWASP rules for security and W3C standards for accessibility
- Created **RESTful** API endpoints for 2 backends, a **Micronauts(JVM)** & **Grails GORM** and a LAMP based **Perl** app
- Built internal tools (**Next.js**, **Firebase**, **GCP**) with real-time webhooks; refactored legacy code with reusable helpers to boost performance
- Remodeled **MySQL** database schema to reflect new features updates by migrating changes through flyway for multiple **Kubernetes** environments
- Maintained **Kubernetes** clusters and **AWS** infrastructure (ECS, EC2, EKS) by adjusting scaling policies, managing VPC and security groups via K9s
- Contributed to CI/CD pipeline setup using Docker and GitHub Actions for staging, Q/A & production deployments

Full Stack Engineer | Stream Engine

Nov 2020 - May 2021

- Collaborated with 3 backend engineers to develop a shared-schema, multi-tenant SaaS application
- Designed & implemented schema for **PostgreSQL** back-end & created **REST** API endpoints using **Django** & **Django Rest Framework**

HPC Research Assistant | Knox College

Jun 2018 - Jun 2020

- Developed a task mapping algorithm for Dragonfly an HPC machine that decreases latency for the cluster
- Implemented a facial recognition algorithm in **C** for the Raspberry Pi then parallelized code to run 50% faster on the quad core chipset by **OpenMP**

LEADERSHIP ACTIVITIES

SEAS Ambassador | GWU

Jun 2024 - May 2025

- Collaborating with a team of 6 ambassadors to overcome academic and social difficulties for students in the School of Engineering and Applied Sciences