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, Svelte, Vue, React, Go TypeScript, Grails GORM, Rust, Php React Native, Laravel, Django, C, CSS Next.Js, GraphQL, NoSQL, HTML5

CLOUD & DEVOPS

AWS, Forge, Docker, WSL2, Ubuntu Sentry, Git, 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)

Al Research | GWU

Jan 2024 - Present

- Led research in Weak-Strong alignment and Reinforcement Learning from Al Feedback (RLAIF), an LLM-based reward model to guide another model
- Built and evaluated custom LLM pipelines using PyTorch, Huggingface, Transformers, Ollama & LangChain
- 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

Software Engineer | TWST Events (Previously CSS)

May 2021 - Aug 2023

- Led maintenance and modernization of 2 legacy **Java** systems, introduced architectural updates to improve reliability
- Spearheaded the UI overhaul for Vue, Next.js & React applications following OWASP rules for security and W3C standards for accessibility
- Designed & deployed **RESTful** API endpoints across microservices based backends, using **Micronauts(JVM)**, **Grails GORM** and a LAMP based **PerI** app
- Architected internal developer tools (Next.js, Firebase, GCP) with real-time webhooks; refactored code with reusable modules to boost feature delivery
- Directed schema redesign for **MySQL** databases, coordinating Flyway migrations across multi-tenant **Kubernetes** environments
- Administered AWS cloud infrastructure (ECS, EC2, EKS), implemented autoscaling policies, managing VPC and security groups via K9s and IaC tools
- Contributed to CI/CD pipeline setup using Docker and GitHub Actions for dev, Q/A & production deployments

Full Stack Engineer | Stream Engine

Nov 2020 - May 2021

- Designed a multi-tenant SaaS product, developed a shared-schema architecture in **Django**, **PostgreSQL**
- Created a robust suite of REST APIs and worked on UI and UX development

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