

Syed Aun Abbas

syedaun.abbas@gwmail.gwu.edu | [LinkedIn](#) | [Github](#) | [DEV](#)

EDUCATION

MS Computer Science - The George Washington University

Aug 2023–May 2025

Honors & Awards: SEAS Dean's Award

BS Computer Science-National University of Computer and Emerging Sciences

Aug 2019-June 2023

Honors & Awards: Dean's List 3/8 semesters

Area of Expertise

Coursework: Software Development, Machine Learning, Parallel Computing, Distributed Data Engineering, Algorithms and Data Structures, Object Oriented Design and Analysis, Operating Systems, Blockchain, Automata, Databases, DevOps, Assembly Language, Information Security, Cloud Computing, Data Mining

Languages/Frameworks: Python, Go, Java, JavaScript, TypeScript, React.js, Node.js, Next.js, Express.js, C++, C#, .NET, Solidity, Tailwind CSS

Databases: MySQL, MongoDB, Redis, DynamoDB, Oracle, Ethereum

Tools/Services: Git, Docker, AWS, RestAPI, GraphQL, tRPC, CI/CD, Github Actions, Linux

WORK EXPERIENCE

iD Tech

Princeton, New Jersey

On Campus Instructor

June 2024 - Aug 2024

- Successfully designed and delivered **AI/ML** courses, resulting in the proficient training of over 30 students, with a 100% positive feedback rate
- Empowered students to develop proficiency in **Python, Linux, TensorFlow, Keras**, and **NVIDIA Jetson Nano**, enabling them to build and deploy machine learning applications

National Information Technology Board

Islamabad, Pakistan

Full Stack .NET Developer Intern

July 2022-Aug 2022

- Utilized **HTML, CSS**, and **JavaScript** to create engaging and user-friendly interfaces.
- Developed robust back-end components using **SQL Server, C#** and the **.NET Framework** which included handling data processing, data storage, business logic, and integration with external APIs.
- Conducted in-depth analysis and introduced appropriate indexing techniques in the **SQL** database, resulting in a 40% reduction in query response times and more efficient data retrieval

Projects

Final Year Project - MedChain [Github](#)

A decentralized healthcare management ecosystem-integrated with a smartwatch to track incentivized fitness goals

- Stored encrypted records of patients on **IPFS, MongoDB** and **Ethereum** blockchain
- Utilized **Solidity** and **Node.js** for crafting **smart contracts** that granted limited access to doctors
- Explored complex cryptosystems such as **proxy re-encryption** for secure data exchange between stakeholders
- Integrated app with a smartwatch via **Google Fit**, enabling monitoring and tracking of users' fitness activities
- Introduced a cryptocurrency-based reward system which boosted user participation by 50%

Project Management App (JavaScript) [Github](#)

- Developed a robust full-stack **CRUD** app using **MongoDB, GraphQL, Apollo** and **React**
- Achieved a 30% improvement in real-time data interaction efficiency by utilizing **GraphQL** queries
- Built a **CI/CD pipeline** using **Github Actions** for automated testing and deployment

Threads Social Media Application (TypeScript) [Github](#)

- Developed a "Threads" app clone using **Next.js, MongoDB** and **TailwindCSS**
- Implemented secure authentication through **Clerk**, managed file uploads with **UploadThing**, and integrated **Webhooks** for real time event handling
- Utilized **TypeScript** for strong typing, **Zod** for data validation, and **React Hook Form** for form management

Pitchify - Startup Idea Platform (Typescript) [Github](#)

- Developed a platform for entrepreneurs to showcase startup ideas using **Next.js 15, React 19, Sanity CMS**
- Integrated **NextAuth** for GitHub authentication and **Sentry** for real-time bug tracking
- Boosted page load speed by ~35% with **partial pre-rendering**, improving SEO and UX
- Built a sleek, scalable UI with **TailwindCSS, ShadCN**, and **TypeScript**

Knight's Tour (C++) [Github](#)

- Implemented algorithms in **C++** to solve the Knight's Tour problem on arbitrary sized $n \times m$ chessboards
- Optimized algorithms using **divide-and-conquer** strategies and achieved linear-time complexity of $O(n \cdot m)$

Leadership Experience

Entrepreneurship Project Manager

- Led a team of 6 to launch a Spotify Plaques business venture for a course project
- Curated engaging social media content, yielding 1000+ followers and 30000+ PKR business revenue