

Nauman Ahmed

AI ENGINEER/FULL STACK
DEVELOPER

Details

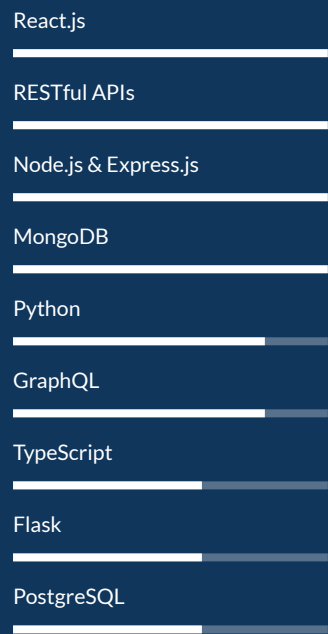
Passau
Germany
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DATE OF BIRTH
07-August-1997

Links

[Portfolio-Website](#)
[GitHub](#)

Skills



Languages



Hobbies

Passionate about cricket and football, enjoying both watching and analyzing game

Profile

Experienced Full Stack Web Developer and Software Engineer skilled in React.js, Next.js, Flask, GraphQL, and TypeScript for building scalable, interactive applications. Expertise in dynamic data visualization, complex data analysis, and robotics research, particularly in Coverage Path Planning. Proficient in deploying robust solutions using AWS, Heroku, and DigitalOcean. Driven to deliver innovative, efficient technology solutions that align with business objectives.

Employment History

Full Stack Web Developer, EventPlanning24

JUNE 2023 – DECEMBER 2023

Worked as a React.js developer using TypeScript, contributing to the development of Next.js applications. Responsibilities included RESTful API communication, UI enhancements, and feature development.

Software Engineer, StratgIt, Karachi, Pakistan

SEPTEMBER 2019 – SEPTEMBER 2021

Worked as a React.js developer, focusing on optimizing platform performance, designing responsive and mobile-friendly websites, and testing applications for usability, maintenance, and bug fixes.

Projects

Master Thesis - Coverage Path Planning

JULY 2024 – MARCH 2025

My master's thesis focuses on optimizing Coverage Path Planning (CPP), a key challenge in robotics and automation. CPP determines the most efficient path for a robot to cover an area without overlap, with applications in agriculture, cleaning robots, and search and rescue. My research addresses obstacles, energy efficiency, and coverage time, developing advanced techniques to enhance autonomous system performance.

AI Assistant for Course Information Retrieval

AUGUST 2024 – AUGUST 2024

Developed an AI assistant to help University of Passau students efficiently retrieve course-related information. Scraped news and Mensa data, parsed module catalogs, and stored them using sentence embeddings for precise query handling. Integrated a Language Model for natural language responses and enhanced conversational capabilities with context-aware history management. Delivered a functional tool for querying academic modules, news, and cafeteria menus.

Education

Master of Science in Computer Science, University of Passau, Germany

OCTOBER 2021 – MARCH 2025

Bachelor of Science in Software Engineering, Usman Institute of Technology (N.E.D), Karachi, Pakistan

OCTOBER 2016 – JULY 2020