

Jaghan Vishwanathan Ayyappan

- Mörfelder Landstraße 235, 60598 Frankfurt am Main 🕜 https://jaghan.com/
- in linkedin.com/in/jaghanvishwanathan

PROFILE

Motivated and detail-oriented Master's student in Information and Communication Engineering at TU Darmstadt with hands-on experience in full-stack development, UX/UI design, and website management. Skilled in building responsive, scalable web applications using Angular, TypeScript, HTML/CSS, and WordPress. Passionate about delivering user-focused solutions and enhancing digital experiences.

PROFESSIONAL EXPERIENCE

05/2022 – 08/2024 Chennai, India

Associate Engineer - Full Stack Developer

Virtusa Consulting Services Pvt Ltd

- Developed high-performance web applications using **Java** and **Angular**, improving system efficiency by **30%** through optimized code and UX/UI refinements.
- Designed and implemented responsive front-end interfaces with Angular, HTML, and CSS, ensuring accessibility and cross-browser compatibility.
- Led UX/UI design workflows, from creating wireframes and prototypes in Figma and Adobe XD to developing pixel-perfect UI components, streamlining the design-to-development pipeline.
- Oversaw front-end team hiring by conducting technical interviews, aligning candidate profiles with project requirements, and delivering knowledge transfer sessions to onboard new team members.

01/2022 – 04/2022 Chennai, India

Intern - Full Stack Developer

Virtusa Consulting Services Pvt Ltd

- Document code, APIs, and system architecture to facilitate future maintenance and onboarding of new team members.
- Design and implement user interfaces with a focus on usability and aesthetics.
- Collaborate efficiently with team members.
- Enhance code quality through rigorous development practices and optimization methodologies.

★ VOLUNTEER EXPERIENCE

04/2025 – Present Darmstadt, Germany

TU Darmstadt Space Technology e.V.

Web Development and Public Relations

- Developing the official BVSR Conference website, ensuring accessibility, responsiveness, and professional presentation of projects and events.
- Design and publish visually appealing, technically accurate posts to communicate complex aerospace projects in a clear and engaging way to diverse audiences.
- Coordinate with internal project teams to highlight milestones, events, and achievements through timely and effective communication.

CERTIFICATES

• Oracle Certified Associate, Java SE 8 Programmer ☑

 Foundations of UX Design -Google

EDUCATION

10/2024 – present Master of Science (M.Sc.)

Darmstadt, Germany Technische Universität Darmstadt

Information and Communication Engineering

08/2018 – 04/2022 **Bachelor of Engineering (B.E.)**

Chennai, India Anna University

Electronics and Communication Engineering

SKILLS

Web & Front-End

Angular, TypeScript, React, JavaScript, Wordpress, HTML & CSS, Bootstrap, RxJS, PHP

Testing

Unit Testing, Karma, Jasmine

Softwares, Tools & Platforms

Git, Jira, Postman, Microsoft Office, MATLAB

Soft Skills

Communication, Team Collaboration, Leadership, Problem Solving, Adaptability, Time Management, Critical Thinking, Mentorship, Attention to Detail, Conflict Resolution

Back-End

Java, Spring (Spring Boot, Spring Security), NodeJS, Maven, Python

UX & Design

User Experience Design (UX), Figma, Adobe Creative Cloud, Adobe XD

Databases

SQL

PROJECTS

PlazaPalooza

Led the **front-end team** for an AI-driven board game, designing a high-performance UI with **Angular & TypeScript**. Implemented **state management**, optimized API handling, and applied **UX design principles** for an engaging experience. Ensured **scalability** with a modular architecture.

Detection of Bone Fracture using Image Processing

Built an Al-powered diagnostic system using **MATLAB & machine learning** for fracture detection. Achieved **85% accuracy**, reducing manual analysis time by **60%**, and enhanced computer vision techniques for improved anomaly recognition.

Integrated Soldier Security System

Developed a **wearable IoT device** for real-time tracking of soldiers' vitals, location, and field visuals. Implemented **live satellite data streaming** and a **low-latency communication** system for mission-critical updates.

Biometric Attendance using Cloud

Created a cloud-based biometric authentication system with **fingerprint & facial recognition** for secure workforce management. Built using Raspberry Pi & AWS, ensuring **scalability & real-time data security**.

E-Kart

Developed an Angular-based e-commerce platform with **secure transactions** and an **intuitive user experience**, featuring a responsive UI, **AuthGuard enforcement** for robust security, and integrated seller management tools using Angular, TypeScript, Node.js, and SQL.

A LANGUAGES

EnglishGermanTamilC1A2C2