



Jaghan Vishwanathan Ayyappan

✉ jaghan2001@gmail.com ☎ +49 1622597101

📍 Saalbaustraße 11, 64283 Darmstadt, Germany 🌐 <https://jaghan.com/>

LinkedIn: linkedin.com/in/jaghanshivanathan

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.

HOME VOLUNTEER EXPERIENCE

04/2025 – Present
Darmstadt, Germany

TU Darmstadt Space Technology e.V.

Public Relations and Web Development

- Developing the official BVSR Conference website ↗, ensuring responsiveness and alignment with the organization's branding
- 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 Darmstadt, Germany	Master of Science (M.Sc.) Technische Universität Darmstadt Information and Communication Engineering
08/2018 – 04/2022 Chennai, India	Bachelor of Engineering (B.E.) 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 (Photoshop, Lightroom, Illustrator, Premiere
Pro), 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 AI-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.

LANGUAGES

English

C1

German

A2

Tamil

C2