Ayaan Bagawan

Bengaluru, India | +91 80889 29541 | ayaan.i.bagawan@gmail.com
linkedin.com/in/ayaan-bagawan-5a895137b | github.com/Ayaan2316 | ayaanbagawan.in

Education

Dayananda Sagar University — Bengaluru, Karnataka
B.Tech in Electronics and Communication Engineering — *2025 – 2029 (Expected)*

Class XII: St. Paul's PU College, Belagavi, 83% (2024); **Class X**: Bensons English Medium High School, Belagavi, 95.5% (2022)

Experience

Twilight — Oct 2026 – Present
Co-Founder, Web Design and Development Studio — *renderingtwilight.online*

- Run a two-person studio that builds websites, web apps, mobile apps, UI designs and logos for small businesses; handle frontend design, client calls and project logistics
- Designed the UI/UX and frontend for the first paid client, **Hashtag Optical** (hashtagoptical.in), a React site for a two-branch optical store with local SEO, WhatsApp buttons and Maps directions; it now brings the store new customers
- Received 4–5 client enquiries before the studio's own website went live

Projects

The Case File: 3D Interactive Portfolio | *Next.js, React Three Fiber, GSAP, Blender* — 2026

- Designed and built a scroll-driven 3D portfolio set in a noir detective's office, lit in Blender Cycles and baked to lightmaps, with flashlight, rain and neon effects running live in the browser
- Added a "Recruiter Mode" that turns the same content into a plain HTML résumé, scoring 100 in all four Lighthouse categories

Bumblebee: Robo Soccer Bot | *ESP32, Arduino (C++), Bluetooth* — Apr 2026

- Led a 4-member team to the **finals of Robo Soccer at CELESTAI'26**, DSU's annual techfest (IEEE CASS and AESS SBCs), out of 35+ teams, and drove the bot in matches
- Designed the sheet-metal chassis and built the electronics: an ESP32 over Bluetooth driving four 12V 1000 RPM Johnson geared motors through two dual motor drivers on an 11.1V 3S LiPo

AI Desk Pet (in progress) | *ESP32-S3*: solo desk robot with an animated face, planned LLM voice chat and face tracking — 2026

Research

Stock Market Performance vs GDP Growth | *Team of 5; Excel, Python (pandas, statsmodels)* — 2026 – Present

- Testing whether stock returns track and predict real GDP growth in the USA, India and Sri Lanka (developed, emerging, frontier) with 2001–2025 quarterly data, using correlation, OLS and pooled regression, Granger causality and Chow tests
- Found a significant positive link in all three countries: markets lead GDP by one quarter (explaining up to 35% of US GDP-growth variation), and the link grew 3–4 times stronger during the 2008 crisis and COVID-19

Data Privacy Research Paper | *Co-authoring with a faculty mentor at DSU; details confidential until submission* — In progress

Achievements

- **2nd Place**, Bharatiya Antariksh Hackathon 2025 (National Space Day), DSU: crop disease detection from satellite imagery
- **JEE Main 2025**: 91.38 percentile; qualified for JEE Advanced 2025
- Built **Disha Edu**, a learning platform for dyslexic students, and pitched it at several hackathons
- Competed in NASA Space Apps Challenge 2025, La Casa de Code: Techflix S2 (ACM DSU) and Prompt Wars (ACM DSU)

Skills

Programming and Web: C, Python, Verilog (basic), HTML, CSS, React, Next.js, React Three Fiber, GSAP
Hardware: ESP32, Arduino, Soldering, FPGA Prototyping (Xilinx Vivado), Multimeter, Oscilloscope, KiCad, Altium (learning)
Design: Figma, Blender, Photoshop, Illustrator, Canva, Logo and Brand Design
Data and AI: Excel, PyTorch, LLM Training Basics, Prompt Engineering
Writing: Technical Writing, Research Reports, Literature Review, Content Writing
Languages: English, Hindi, Urdu, Marathi

Certifications and Workshops

VLSI Digital Design Flow and FPGA Prototyping, STMicroelectronics, NIT Trichy: Vivado, Spartan-7, Verilog — Feb 2026

LLM Forge: From Code to Cognition, DSU: built and trained a GPT-style model from scratch in PyTorch — Oct 2026

Workshops: Drone building (Team Roxx, DSU), Git and GitHub (DSU)

Leadership and Activities

- **Head Boy**, Bensons English Medium High School: led school events and organised contests and workshops
- Stage Management, Cultural Team (CPA), DSU; Member, Happiness Club, DSU; led teams at several hackathons