

Giacomo Cappelletto

Boston, MA | Treviso, Italy

linkedin.com/in/giacomo-cappelletto

giacomo-cappelletto.app

giacomo.cappelletto@icloud.com

+39 324 681 4985 | +1 (857) 753-0133

github.com/JJCAPPE

TECHNICAL PROFILE

Computer Engineering student at Boston University with a 3.97 GPA, building production software, LLM-agent workflows, data systems, applied ML pipelines, and robotics autonomy systems. Strongest in Python, TypeScript, React/Next.js, SQL/PostgreSQL, Rust, Databricks, Flask/Dash, and cloud-deployed AI applications.

EDUCATION

- **Boston University, Boston, MA** 2024 – 2028
B.Sc. in Computer Engineering; GPA: 3.97
- **H-Farm International School, Venice, Italy** 2022 – 2024
International Baccalaureate (IB) Diploma *HL: Mathematics, Physics, Computer Science*

TECHNICAL EXPERIENCE

- **Banca Mediolanum, Milan, Italy** Jun 2026 – Present
Software / AI Intern, Customer Knowledge
 - **Technical Ownership:** Owned an internal AI-agent runtime, enterprise chat app, and prompt-governance platform across architecture, full-stack engineering, evaluation, deployment, and stakeholder iteration.
 - **Agent Platform Engineering:** Built a Databricks Model Serving agent with MLflow ResponsesAgent and LangGraph ReAct; designed a versioned Pydantic contract, policy-controlled tool execution, request-scoped context budgets, governed dynamic SQL, citation-backed document RAG, evidence-grounded review, and MLflow tracing.
 - **AI Product Engineering:** Built a React/Vite + FastAPI Databricks App with SSE streaming, authenticated sessions, structured renderables, Lakebase/PostgreSQL, MLflow feedback, and Asset Bundle deployment.
 - **Evaluation & Governance:** Built a Dash/Flask platform for append-only Delta prompt versioning, permission-aware workflows, side-by-side benchmarks, LLM judging, MLflow GenAI scoring, and Unity Catalog quality controls.
- **Boston University College of Engineering, Boston, MA** Jan 2026 – May 2026
Undergraduate Machine Learning Researcher
 - **Computer Vision Pipeline:** Built a Python biomechanics pipeline to stabilize rowing video, run single-athlete 2D keypoint inference with MMPose, lift poses to 3D skeletons with MotionBERT, and output per-frame joint positions and angles.
 - **Kinematic Analysis:** Computed stroke-averaged 3D kinematics to quantify coordination, range of motion, technical consistency, and timing differences across rowing strokes.
 - **Sequence Modeling:** Trained sequence-to-sequence regression models mapping time-aligned 3D kinematics to rowing force curves, validated against instrumented on-water and erg telemetry.
- **Boston University Men's Rowing, Boston, MA** Jan 2026 – May 2026
Software Engineer
 - **Team Training Platform:** Built a mobile-first training tracker for 50 BU Men's Rowing athletes and coaches, unifying athlete logging, coach review, proof-validated entries, leaderboards, configurable weekly cutoffs, and team-specific requirements.
 - **Product Iteration:** Iterated directly with athletes and coaches to add requested features and improve team workflows, with expansion planned to two additional teams for a projected 150 total users.
 - **Backend + Automation:** Implemented Supabase and Prisma-backed data models with role-based access, proof retention, scalable reporting, and automated weekly recap emails for athlete and coach workflows.
- **SOCIETA CAPPELLETTO S.R.L., Treviso, Italy** May 2025 – Oct 2025
Software Engineer, Tauri Inventory Management System Rebuild
 - **Migration + Performance:** Rebuilt an Electron inventory app using Tauri, React, and Rust, reducing app size by 70%, memory usage by 80%, and startup time by 60%; improved Shopify inventory search by 43% through parallel API processing and GraphQL-optimized queries.
 - **Production Features:** Built SKU-based instant search, Firebase-backed audit history, real-time inventory reconciliation, multi-location update workflows, GitHub Releases distribution, and auto-update deployment.

- **TickIT GmbH, Remote**

Nov 2024 – Feb 2025

Frontend & Backend Engineer

- **Collaborative Platform Development:** Contributed roughly 30,000 lines of code across a 150,000-line online event-ticketing platform as part of a four-developer remote team, working across Ruby backend services and Next.js/TypeScript frontend interfaces.
- **Ticketing + Access Control:** Developed QR-code ticket generation and validation infrastructure, ticket purchasing flows, event pages, ticket validation interfaces, and friend-sharing features for attendee access management.
- **Analytics + Forecasting:** Built internal customer spending tracking systems, analytics pipelines, and organizer dashboards for spending predictions, inventory forecasting, operational metrics, and event cost planning; platform payments were processed through Stripe.
- **Engineering Collaboration:** Participated in remote feature planning, cross-stack implementation, and code reviews, contributing central functionality for event access control and organizer analytics.

SELECTED PROJECTS

- **NoteWorthy – Automated Note Conversion Platform:** Built noteworthy.vercel.app, a Next.js/TypeScript application that converts handwritten notes into styled PDFs and LaTeX. Integrated Google AI Studio, GitHub/Google OAuth, and a Dockerized LaTeX compiler; deployed through Google Cloud Run and Vercel.
- **CIFAR-10 Image Recognition with Neural Architecture Search:** Built a TensorFlow/Keras CIFAR-10 classifier and neural architecture search pipeline to generate, train, evaluate, and select CNN candidates with automated metric logging and best-model selection.
- **Deskinator – Autonomous Desk-Cleaning Robot:** Built Python robotics software for a Raspberry Pi desk-cleaning robot using APDS9960 edge sensing, stepper odometry, RANSAC rectangle fitting, boustrophedon coverage planning, telemetry, and simulation-based performance analysis.

LEADERSHIP & ATHLETICS

- **Boston University Men's Rowing, Boston, MA**

Sep 2024 – Present

NCAA Division I Student-Athlete

- **Performance + Time Management:** Compete at the Division I and national level while balancing 20+ hours per week of training, competition, travel, and team commitments with a full Computer Engineering course load.
- **Awards:** Freshman Student-Athlete of the Year (2025); Most Improved Oarsman (2026).

SKILLS

- **Languages:** Python, TypeScript/JavaScript, SQL, Rust, Ruby, C/C++, Swift, Java
- AI/ML:** LLM agents, RAG, embeddings, semantic search, MLflow GenAI Evaluation, TensorFlow/Keras, MMPose, MotionBERT, RANSAC, Ollama
- Frameworks:** Next.js, React, Node.js, Flask/Dash, Ruby on Rails, Streamlit, Tauri, SwiftUI, Tailwind CSS, shadcn/ui
- Data/Cloud:** Databricks Apps, Unity Catalog, Delta tables, Vector Search, PostgreSQL, Supabase, Prisma, Firebase, Docker, Google Cloud Run, Vercel
- Tools:** Git/GitHub, Raspberry Pi, Shopify GraphQL API, Stripe, GitHub Releases, AI-assisted development workflows