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TECHNICAL SKILLS

Programming Languages: JavaScript, TypeScript, Python, Java, C, C++, C#, Dart, SQL, Arduino

Frameworks: React, React Native, Flutter, Bootstrap, Linux, Docker, Capacitor, Tailwind, Electron, Unity

Databases: MongoDB, Firebase, MySQL, Redis, SQLite, Postgres, Redis

Cloud Applications: AWS, Firebase, EAS

Test, CI/CD and DevOps: Jira, Postman, Git, GitHub, GitLab

WORK EXPERIENCE

App Developer (August 2021 - Today)

- Built and shipped apps in **React, React Native, and Flutter** across **5 years**, ranging from simple client tools to multi-screen systems serving thousands of users; tracked work in **GitHub and Jira** across solo and team projects.
- Took on **full-stack projects** in agile teams, handled planning, implementation, and delivery while staying in sync with designers, other devs, and non-technical clients.
- Worked directly with users to understand what they actually needed, mapped out data flows and system logic, then translated that into concrete software decisions rather than guessing at requirements.
- Debugged across **multiple live apps** by tracing system flows end-to-end, reproducing edge cases, and following a structured **fix-test-release cycle to avoid regressions**.
- Picked up Docker and AI tooling outside of client work to stay hands-on with tools before they became relevant on the job.

Bot Developer (July 2018 - September 2022)

- Engineered and maintained a sophisticated moderation bot on Discord catering to diverse communities, including both domestic and high-profile meta communities.
- Led a team managing **backend infrastructure** and implementing extensive **moderation features** which resulted in over 50% increased moderator productivity & effectiveness in handling cases against harmful malicious users.
- Kept the bot aligned with Discord's evolving API and community expectations by adjusting features and technical direction based on ongoing feedback from leadership and users.
- Developed the bot's foundation, which proved to be crucial in adapting to the API's rapid growth, ensuring functionality and stability.
- Exhibited leadership by managing a team to design and develop a web dashboard for a moderation bot, streamlining moderator workflows and improving operational efficiency.
- Incorporated **AI and image recognition** technology to scan sent image attachments for potential explicit content, achieving an impressive **~90% effectiveness** rate in preventing sharing of inappropriate content.
- Freelanced as a bot developer for **2+ years**, sharpening client communication and delivery skills.

Game Developer (May 2019 - June 2020)

- Developed a **Unity**-based dungeon crawler game in **C#**, featuring enemy AI, diverse enemy types, and weapon systems alongside various playable characters.
- Integrated an in-game **virtual currency system** tied to a Discord bot on the community server, incorporating leaderboard functionalities for competitive engagement of the 100+ players.
- Leveraged implementation of a **REST** server and utilized **MongoDB** for data management supporting the game's core systems.

PERSONAL PROJECTS

outnite (September 2025 - Today)

- Developed a cross-platform app in **React Native** and **Next.js** with **Firebase** for **real-time data sync**, **multi-provider auth** (Firebase, Google OAuth, custom venue access codes), and **native push notifications**.
- Engineered a performant mobile UI; integrated **Mapbox** for **real-time location-based event filtering**, and built a custom debounced **geocoding flow** to avoid redundant API calls during input.
- Built a custom pipeline featuring a **Node.js cron worker** and **Gemini AI** to analyze Instagram event data, with results written back to a **custom administrator panel** to utilize for in-app content.
- Built a *matching* pipeline that queries Firestore for **mutual event interest** between users, using a **reverse index** mapping each user to the events they've marked as attending, **deduplicates** match candidates, and fans out notifications while keeping the mobile client stateless with a **cursor-paginated feed (custom server-side cache with TTL and batch deduplication)**.
- Maintained a TypeScript **monorepo** across mobile (**EAS builds** with dev/preview/prod profiles), web (**Vercel**); used **PostHog** and **Vercel Analytics** for data-driven iteration, with **i18n** via `i18next` supporting multiple locales.

Rewind (June 2023 - Today)

- Developed a unique social media app enabling friend circles to create time-locked groups for sharing hangout snaps, reminiscent of a modern time capsule concept.
- Built the app in **Flutter** using **Firestore snapshot listeners** for live conversation updates and **Firebase Cloud Messaging** for push notifications, with **phone + PIN** authentication.
- Implemented an **offline-first upload queue** using **SharedPreferences** and **local file storage** where photos captured while offline are queued and automatically processed once connectivity is restored.
- Handled media efficiently using compression, **Firebase cached image loading**, and a multi-source asset picker supporting gallery and camera flows.
- Structured the app with **GetX (MVC + repository pattern)**, using reactive **Rx observables** and **lazy-loaded controllers** to minimize unnecessary rebuilds across 50+ Dart files.
- Tracked engagement through a **streak system** (current vs. longest) and a countdown-based conversation unlock mechanic, with **Firebase Analytics** and **Crashlytics** for production monitoring.

Rasposed (September 2021 - Today)

- Built a **cross-platform** timetable and grade tracking app (**Android + PWA**) with **Ionic Capacitor**, featuring a live clock that recalculates the current and next class period.
- Designed an **offline-first** architecture where all user data (timetables, grades, settings) lives in **localStorage**, and **analytics** batch-sync to **MongoDB** once the user is online.
- Implemented **QR code sharing** for custom timetables via **server-generated 6-character share codes and links**, and a fully offline schedule sharing system with **YAML-formatted string compression** inside of QR codes, with a **Node.js/Express** backend and **MongoDB** handling code redemption, analytics, and theme unlocking.
- Added monetization through **AdMob** (banner + interstitial) and a **voucher-based theme purchase system** with **client-side inventory tracking** and **server-side code validation**.
- **Recreated** Spotify Wrapped, but for students featuring their app usage throughout the year using **GSAP**.

Disgradient (March 2020 - Today)

- Developed a web app allowing Discord community administrators to create gradients using their server roles.
- The project initially used **Bootstrap** but transitioned to **React** for increased development flexibility.
- Achieved **rapid adoption** and success within the meta community, with users utilizing the features to this day.
- Integrated a **Discord** bot for seamless automation of role gradient exports from the app to their respective servers.

HOBBIES

Graphic Design

- Developed a strong interest in graphic design over time as my personal projects required such work. It's a creative outlet I frequently turn to.

Arduino Development and CAD

- I've enjoyed Arduino development more and more over the years, allowing me to create physical projects and components from scratch.

Volunteering and activity

- I believe that volunteering provides me with a great opportunity to expand my network, learn more and to strengthen my communication, teamwork, and problem-solving skills through real-world experiences. The most notable volunteering opportunity is **Bloomteq AI Summit 2025**.

EDUCATION

Faculty of Electrical Engineering, University of Sarajevo (2025 - Today)

- Currently studying **Data Science and Artificial Intelligence** at the Faculty of Electrical Engineering, University of Sarajevo.

Prva gimnazija u Zenici (2021 - 2025)

- Maintained a **4,89 GPA** in the last year of high school, excelling especially in IT-related subjects, while being active in school and extracurricular activities, including related competitions both on the city, country and region level.
- Information and communication major (software development)

COMPETITIONS

Raiffeisen AI Hackathon / 2nd place (May 2026)

- Developed a machine learning system that **predicts ATM cash depletion** using **time series analysis** and **geographic clustering**.
- Built a CIT driver **mobile app prototype** with **route optimisation** and **real-time delivery alerts**, targeting **reduced operational costs** and **balancing idle capital across** the ATM network.

OXO Game Jam / 1st place (May 2026)

- Built a **video game solo** in 48 hours as part of an itch.io game jam.
- Implemented dynamic **game object generation** entirely within the jam time limit.

“m:tel App Takmičenje” (January 2025)

- Founded a mobile app development team at my high school.
- Developed a free public-domain audiobook listening app with over **40,000 titles**.
- Our project was awarded as the **best app from Bosnia & Herzegovina** and we earned the opportunity to represent our country at the **regional competition** in Podgorica, Montenegro.

BEST Hackathon Mostar / 4th place (January 2025)

- Developed a mobile application that allows its users to track their contributions to ecology, utilising **LLMs** to award users with points by giving them tasks, and then verifying the completion of those tasks using **object detection**.
- Awarded **4th place** out of 20 at the event by the judges for our mobile application and pitch.

Repl.it Discord Bot Hackathon / 2nd place (January 2022)

- Built a Discord bot game that allows users to play Snake in Discord channels.
- Utilised Discord's then-**new** button components, paired with my own **server-side game board renderer** built and hosted on Repl.it.
- Won 2nd place in the Repl.it Discord Bot Hackathon, being awarded **\$100 in Bitcoin**.