Marin Dedić, Bachelor of Science in Computing

marin.dedic@me.com ● +385 92 3422 232 ● Rab/Rijeka, Croatia
LinkedIn: [Marin Dedić - LinkedIn](#)
GitHub: [Realman78 (Marin Dedić) · GitHub](#)

Profile

As a Backend Engineer with a deep interest in network engineering and security, I have a track record of leading backend development for complex projects. My expertise includes managing real-time services (including WebRTC, WebSocket, and Server-Sent Events), optimizing performance, implementing ETL processes, cache management, DevOps practices, with proficient use of AWS, Docker, and Kubernetes. In addition to these skills, I am well-versed in handling both lower-level protocols like UDP and TCP, as well as newer, higher-level protocols such as HTTP/2, HTTP/3, and gRPC. Additionally, I played a key role in architectural planning, ensuring efficient and robust design to meet the project's complex needs.

During my college years, my deep understanding of networks enabled me to be a teaching assistant for the Computer Networks course. Also at college, I was a teaching assistant for the Embedded Computer Systems course. These experiences not only solidified my technical knowledge but also honed my ability to explain complex concepts clearly and effectively. Apart from that, I also have experience in frontend development (React, Svelte, Vue and Next.js), android app develpment, AI/ML and 3D game development just to name a few of the bigger ones.

As an extroverted individual, I place immense value on communication. I thrive in environments where I can engage in problem-solving, devise creative solutions, and apply critical thinking. My greatest hobby lies in invention and exploration. Whether it involves software or hardware, I am constantly driven by the desire to understand how systems operate at their most fundamental level. This curiosity often leads me to reverse engineering, a pursuit that allows me to unravel and learn from the intricacies of complex systems.

Skills

- **Node.js** (related: Nest.js, Express, WebSockets, Protobufs, Electron.js)
- Fundamental **networking** knowledge
- **Languages** (Strongest to weakest): JavaScript (TS), Go, Java, Python, Rust, C/C++/C#, Shell, PHP
- **Databases** – SQL (PostgreSQL, MySQL, SQLite) & MongoDB
- **Cache** management – Redis
- **Operating systems**: Linux (CentOS certified, Ubuntu, Kali, Raspbian), MacOS & Windows
- **DevOps**: Git, Docker, Kubernetes, NGINX, AWS (Lambda, RDS, S3, Airflow)
- **Architecture** and High Level Design planning
- **Other** more important **technologies/protocols** I have worked with: WebRTC, UDP/TCP, HTTP/2, HTTP/3, QUIC, DNS, HTTPS, BGP
- **Software engineering tools**: Git, Jira, GitHub, BitBucket, Jenkins
- **Other** less important mentions: Wireshark, AI/ML, Android Studio, Game development (Unity & Unreal Engine – Multiplayer and Singleplayer 3D games), Office tools

Experience

Backend engineer @ Agilno d.o.o   **August 2022 – Present**

As the Backend Engineer, I was the lead engineer on multiple projects, including taking charge of the backend engineering of a particularly complex project from its initial architectural planning through to the MVP release. My key responsibilities encompassed the full spectrum of backend engineering: from planning and designing high-performance services to developing, testing, and maintaining them. Also, collaborating with cross-functional teams to deliver on-time and on-budget projects and initiatives.

Often used: Node.js, Nest.js, Docker, Kubernetes, Python, Airflow, AWS, Git, Next.js, React, Tailwind…

Junior Programmer @ Ris Software   **Febrary 2021 – August 2022**

Junior programmer position at Ris software. As a junior programmer, I've gone through many tasks with emphasis on PLSQL and Clarion.

Other duties:

- App development in Clarion
- Development using PostgreSQL
- Task automatization (Python)
- Software testing using Selenium and TestComplete

Student internship @ Asseco   **May 2022 – August 2022**

I did my internship within the faculty at Asseco in the Security & Compliance (DevOps/SysAdmin) department using these technologies: Docker, Kubernetes, Ansible, Gitlab, Jenkins, etc.

Freelance (Runebearer – Lead Programmer)   **November 2020 – February 2021**

Runebearer is an open-world RPG game that is still in development. As the lead programmer, I was in charge of the whole multiplayer and singleplayer aspect of the game.

Responsibilities:

- Multiplayer system development
- Cooperation and leading 2 other programmers

IT assistant @ Imperial d.o.o   **June 2018 – September 2018 && June 2019 – September 2019**

Helping the IT team with whatever was needed. Main responsibilities include Website editing (HTML+CSS+JS) and general help with servers and network configurations.

Education

- ➢ **Faculty of Engineering Rijeka – Graduate University studying of Computer Science (2023 - Present)**

- ➢ **Faculty of Engineering Rijeka – Undergraduate University studying of Computer Science (2020 - 2023) – Awarded Bachelor of Science in Computing in 2023**
- ➢ **High school for electrical engineering and computing – Computer Technician (2016 - 2020)**

Important Certificates

- ➢ **Backend Master Class [Golang + Postgres + Kubernetes + gRPC] (2023)**
- ➢ **Unlocking Backend Peak Performance (2023)**
- ➢ **Complete Linux Training Course (2023)**
- ➢ **Nginx (2023)**
- ➢ **Fundamentals of Backend Engineering (2022)**
- ➢ **Fundamentals of Network Engineering (2022)**
- ➢ **Docker & Kubernetes (2022)**
- ➢ **Node.js Advanced Concepts (2022)**
- ➢ **Node.js Developer Course (2020)**
- ➢ **React - The Complete Guide (incl Hooks, React Router, Redux) (2021)**

Personal Projects Highlight

Roletta - Makes interviewing fast, accessible and easy for both parties.

- *Video/Audio conference, Easy Interview & Meeting scheduling*
- *Shared Code editor with the ability to execute JS code (execution in an isolated environment)*
- *Screen sharing & Realtime chat*

NPM Packages

- *Profile: https://www.npmjs.com/~realman78*
- *Majodo: A template game server supporting UDP, WebSockets and Protobuffers.*
- *Streamer-express-lite: A library that enables users to stream files with 1 line of code.*

VoiceComet - Social media platform with a focus on audio content

- *Live feed, ability to record and post audio files, Real-time chat, profiles and other typical social media platform features.*
- *Taken down since August 2022 because Heroku removed their free hosting tier.*

UpComet - environment which enables users to tranfser files between their devices fast and safe

- *Consisting of:*
  - o *Android app which enables users to share files from their mobile device*
  - o *Web app which enables users to share files from any device that supports internet*
- *Taken down since August 2022 because Heroku removed their free hosting tier.*

Terminal portfolio

- ❖ *My portfolio, but in a terminal-like interactive environment*
  - o *Regular*
  - o *Tor (Dark web) – Access only using Tor, enable JavaScript.*

To see my other 35+ personal projects, visit my GitHub.