Joshua De Matas

Software Engineer

https://www.joshuadematas.me

Jönköping, Sweden https://github.com/tifye dematasjoshua@hotmail.com



Summary

Operating at a senior level — leading projects, designing architecture, and building tools across domains. I've built backend platforms, SSH tunnels, and CLI tools, always with a focus on performance, clarity, and maintainability.

Noteworthy projects

BURNR — Tech Lead and Backend Engineer

A social fitness platform built primarily in Go.

- · Led backend design, service boundaries, and tech stack decisions.
- Designed hybrid storage using PostgreSQL, Firestore, and Cloud Storage.
- Integrated Apple Health syncing and leaderboard ranking based on user goals.
- · Upgraded caching and pub/sub with Dragonfly and Redpanda.
- Deployed backend on self-hosted VPS using Docker Stack/Swarm.

Garden Observer — Real-time 3D Robot Visualization

A full-stack web app to monitor live and simulated robot lawnmowers in 3D.

- Combined Unity Wasm for 3D rendering with Blazor for UI and control layer.
- Parsed SVG layouts to generate meshes for 3D environments.
- Used an internal event hub for real-time robot telemetry, updating position in 3D
- Created a Blazor-to-Unity component bridge (akin to custom React renderer).

Coconut – Reverse proxy SSH HTTP tunnel

An HTTP tunnel over SSH in Go (similar to Ngrok), using only standard libraries.

- · Designed reverse proxy routing based on subdomains and SSH channels.
- · Added multiplexed and dedicated tunnels to handle websockets and long-lived connections.
- Integrated Apple Health syncing and leaderboard ranking based on user goals.
- Currently building a production-ready version with full monitoring and tests.

Cinnamon — Media Stashing Server and Extension

Created a self-hosted service to capture and store HLS video streams.

- Built a Go backend using FFmpeg to convert and stash videos.
- Integrated MinIO (S3 compatible) storage and built a lightweight web UI.
- Developed a custom browser protocol (cinnamon://) to launch downloads from the web.

References

Tommy Gustavsson, Software Architect

tommy.gustavsson@husqvarnagroup.com +46 725877027

Husqvarna Group, Work/character reference (prefers email first)

Thomas Jansson, Lead Senior Software Engineer

thomas.jh.jansson@protonmail.com

LinkedIn

+46 708149315

Husqvarna Group, Work reference

Malin Janrup, Technical Project Manager

malin.jernrup@husqvarnagroup.com LinkedIn

Husqvarna Group, Character reference

Technical skills

Go Docker GCP React
Terraform PostgreSQL Redis
Redpanda OpenTelemetry C#
Sqlite Unity Javascript
S3 storage Github SQL

Hobbies

Programming, digital games, and board games. I enjoy making random programs and exploring solutions. Lately, I've been diving deeper into the internals of the tools I use — exploring how things really work.

Visit my

GitHub it's green

Digital notebook very casual

Portfolio read about projects

LinkedIn

CV again for whatever reason

Experience

Programming since 2015, professional since 2020. Software engineering is both my profession and creative outlet.	
Tech Lead, Senior Software Enq	gineer Go GCP Pub/Sub Redis Firestore PostgreSQL Terraform
BURNR	Grafana Prometheus OpenTelemetry
2024 - Now Remote	
• Leading a small team in building	g a robust platform.
Primarily built around GCP using	g Terraform.
 Using simulation-based and Te 	estcontainers-driven testing to validate system behavior.
Mentoring two junior engineers	s, supporting their growth through code reviews, architectural discussions, and pair programming
Software Engineer	Go Azure Unity DotNet C# Blazor Algorithms
Husqvarna Group, Robotics R&D	
2022 - 2024 Huskvarna, Sweden	
• Initially began work on simulati	on software in Unity.
• Later positioned as an internal	project incubator, successfully leading four projects from ideation through execution to launch.
Developed internal tools that re	esolved key pain points and improved workflows across teams.
 Maintained a high standard acr backend services. 	ross diverse domains — from Blazor and 3D web to Azure, algorithm optimization, CLI tools, and
Software Engineer	PostgreSQL NodeJS Express.js Vue Socket.IO
Jönköping University, ROL Ergo	
2021 Jönköping, Sweden	
Collected heat and motion sen	sor data that was visualized in a web UI.
Enhanced sensor data usability	y by processing over 15 sensors in real time.
Laboratory Engineer	Docker AWS Go Swift C++ NodeJS SQL
Jönköping University	
2020 - 2022 Jönköping, Sweden	
• Wrote guides on Docker, MS SC	QL, and iOS.
Mentored over 25 students acr	oss two academic years.
 Taught subjects such as datab programming. 	pases, data structures and algorithms, OOP, Node.js development, iOS development, and network
I'm deeply excited about programmir maintain.	ng — it's more than a job; it's what I do for fun. I love building systems that are useful, durable, and a joy to
Education	Scholarship
B.S. Computer Science	Jönköping University

B.S. Computer Science

Jönköping University 2019 - 2022 Jönköping, Sweden ${\it Chosen as one of the top-performing students to compete in a coding challenge at J\"{o}nk\"{o}ping Uniside Chosen as one of the top-performing students to compete in a coding challenge at J\"{o}nk\"{o}ping Uniside Chosen as one of the top-performing students to compete in a coding challenge at J\"{o}nk\"{o}ping Uniside Chosen as one of the top-performing students to compete in a coding challenge at J\"{o}nk\"{o}ping Uniside Chosen as one of the top-performing students to compete in a coding challenge at J\"{o}nk\"{o}ping Uniside Chosen as one of the top-performing students to compete in a coding challenge at J\"{o}nk\"{o}ping Uniside Chosen as one of the top-performing students to compete in a coding challenge at J\"{o}nk\"{o}ping Uniside Chosen as one of the top-performing students to compete in a coding challenge at J\"{o}nk\"{o}ping Uniside Chosen as one of the top-performing students to compete in a coding challenge at J\"{o}nk\r{o}ping Uniside Chosen and Chosen as one of the top-performing students to compete the challenge at J\"{o}nk\r{o}ping Uniside Chosen and Chosen as one of the top-performing students to compete the challenge at J\r{o}ping Uniside Chosen and Chosen and Chosen and Chosen as one of the challenge at J\r{o}ping Uniside Chosen and Chosen at Chosen and Chosen and$ $versity.\ Awarded\ a\ 15,000\ SEK\ scholarship\ for\ building\ a\ full-stack\ admin\ system\ with\ React,\ Node. js$ (NestJS), Redis, and PostgreSQL.