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-based HTTP tunnels, and CLI tools. My broad engineering perspective helps me create efficient, maintainable systems focused on performance, clarity, and developer experience.

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

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. Recently I've been falling in love with going under the hood of technologies I used and learning the inner workings of things.

Visit my

GitHub too many unfinished projects

Digital notebook very casual

Portfolio read about projects

LinkedIn

CV again for whatever reason

Experience

Programming since 2015, professional since 2020. I treat software engineering as both a craft and a pastime.		
Tech Lead, Senior Software Enginee	r Go GCP Pub/Sub Redis Firestore PostgreSQL Terraform	
BURNR	Grafana Prometheus OpenTelemetry	
2024 - Now Remote	Gladial Fromodisas Openisonetry	
• Leading a small team in building a rol	oust platform.	
• Primarily built around GCP using Terr	aform.	
\bullet Utilizing simulation testing and testi	using Testcontainers.	
Mentoring two junior engineers, sup	porting 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 simulation so	ftware in Unity.	
• Later positioned as an internal project	ct incubator, successfully leading four projects from ideation through execution to launch.	
• Developed many other tools along si	de alleviating many internal pain points.	
 Kept high standard of working in a wi linear algebra, CLI tools, backend and 	ide range of areas: Blazor, 3D web, Azure Cloud, the nitty-gritty of algorithm optimization and d APIs.	
Software Engineer	PostgreSQL NodeJS Express.js Vue Socket.IO	
Jönköping University, ROL Ergo		
2021 Jönköping, Sweden		
Collected heat and motion sensor da	ata that was visualized in a web Ul.	
Enhanced sensor data usability by processing the sensor data usability by processing the sensor data usability by the sensor	rocessing 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 SQL, an	d iOS.	
• Led classes of over 25 students, pro-	viding guidance and support throughout two years of their studies.	
 Worked with topics including databa iOS development, networking progra 	ises, data structures & algorithms, object-oriented programming, NodeJS web development amming, and more.	
I'm deeply excited about programming — fo	r me, it's more than a job. I love building systems that are useful, durable, and a joy to maintain.	
Education	Scholarship	
B.S. Computer Science	Jönköping University	

<u>Jönköping University</u> 2019 - 2022 Jönköping, Sweden Selected to compete in a coding challenge among the top-performing students at Jönköping University, where I won a scholarship of 15,000 Kr. The challenge involved creating a full-stack admin system, which I developed using React, Node.js NestJS, Redis, and PostgreSQL.