# Geovane Fedrecheski

Software Engineer | Embedded Systems | IoT | Security | PhD

Engineer-researcher bybrid with 10+ years spanning Web, em

Engineer-researcher hybrid with 10+ years spanning Web, embedded systems, secure IoT, and open source protocol stacks. Passionate about solving real problems by applying robust connectivity and security solutions.

#### **EDUCATION**

# Escola Politécnica da USP, Electrical Engineering, PhD

2017 - 2022, SÃO PAULO - SP - BRAZIL 🔯

Decentralized Security for IoT Swarms (links: thesis, defense).

# **UC Berkeley,** *Visiting Researcher*

NOV 2019 - MAR 2020, BERKELEY - CA - USA

## **UNICENTRO**, Computer Science, Bachelor

2010 - 2013, GUARAPUAVA - PR - BRAZIL 🔕

#### **EXPERIENCE**

# **Inria**, Lead Research Engineer

APR 2023 - NOW, PARIS - FRANCE 🚺

Maintainer of a Rust EDHOC stack (<u>45k+ downloads</u>). Co-author of an <u>IETF draft</u> (<u>demo</u>). Lead of the <u>OpenSwarm</u> Testbed (goal: 1000 <u>DotBots</u>), coordinating partners across Europe and Asia. <u>Created Mari</u>, a new link layer and supporting infrastructure, from concept to validation (<u>demo</u>). Covered: protocol design, simulation, bare-metal implementation on Nordic SoCs, and deployment on large-scale testbeds. Achieved responsive communication in dense wireless environments (200+ nodes).

# LSI-TEC, Research Engineer

OCT 2015 - FEB 2023, SÃO PAULO - BRAZIL 🔕

Deployed a <u>smart city IoT pilot</u> in 20 police cars. Created <u>libraries</u> used in 10+ papers on IoT Swarms. Taught an IoT <u>MOOC</u> reaching 100k+ students.

## Alura, Software Programming Instructor

JUN 2022 - OCT 2023, SÃO PAULO - BRAZIL 🔯 (remote, part-time)

Taught HTTP and Security, reaching 30k paying students (avg. score 9.2/10).

## EasyFix, Co-Founder & CTO

JAN 2017 - JAN 2018, SÃO PAULO - BRAZIL **S** (startup, part-time)

Built backend & led tech for automotive service marketplace (300+ users).

## **LG Electronics**, Trainee / Software Engineer

MAR 2014 - SEP 2015, SÃO PAULO - SP 🔕

Solved **Android connectivity** issues affecting **millions** of LATAM devices.



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### **TECHNICAL COMPETENCES**

Domains: Embedded, Networking, Security, Web, Protocol Design.

Languages: <u>C, Python, Rust,</u> <u>Elixir</u>, <u>Javascript</u>, Java, Bash.

Protocols: EDHOC, CoAP, BLE, LoRaWAN, HTTP, TLS.

Writing: <u>papers</u>, <u>standards</u>, and documentation.

#### **SOFT SKILLS**

Leadership, <u>public speaking</u>, <u>creativity</u>, <u>teaching</u>.

#### **LANGUAGES**

Portuguese – native. English – fluent (TOEFL 108/120). French – intermediate. Spanish – elementary.

#### **LINKS**

Open source:

https://github.com/geonnave
Personal website:
https://geonnave.com
Publications:
https://scholar.google.com/cita
tions?user=TBf0rLkAAAAI