# LUKA STRIZIC

 ★ Zürich, Switzerland
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#### WORK EXPERIENCE

GOOGLE Software Engineer Oct 2018 — Present Zürich, Switzerland

Google Shopping team.

AMPHINICY Software Engineering Intern, DSP Jul 2018 — Aug 2018 Zagreb, Croatia

Implemented a low-density parity-check (LDPC) decoder of satellite signals and researched other implementations on a GPGPU platform using CUDA.

SWIFT NAVIGATION Software Engineering Intern, Firmware Dec 2017 – Mar 2018 San Francisco, California, USA

Added CAN bus and NMEA2000 support to the Piksi Multi and Duro GNSS Receivers.

**GOOGLE** Software Engineering Intern, Networking Aug 2017 — Dec 2017 Madison, Wisconsin, USA Platforms team. Worked on a low-level, low-latency, high-performance networking engine in C++. It is used in Google's datacenters supporting big products that you've definitely heard of. The result of the internship was successfully deployed into

production.

UNIVERSITY OF COLORADO BOULDER

Visiting Research Scholar Feb 2017 — Aug 2017 Boulder, Colorado, USA

Department of Aerospace Engineering Sciences, Colorado Center for Astrodynamics Research. Worked under Prof. Dennis Akos in support of his GNSS radio-frequency interference detection and localization research. Implemented a crowdsourced GNSS jammer detection system with elements such as a high-performance software-defined radio USB host in C++, an Android app to collect GNSS obesrvables and a GNSS measurement processing backend in Python.

**GOOGLE** Software Engineering Intern, Compiler Jun 2016 — Sep 2016 Zürich, Switzerland Search Infrastructure team. Designed and implemented a JIT compiler in C++, using LLVM as the backend, for an internal Lisp-like language used for structured queries.

**SARTURA Software Engineering Intern, Embedded** Jul 2015 — Nov 2015 Zagreb, Croatia Lead the development of an extensible CWMP/TR-069 client (remote router management) in C, targeting the OpenWrt router platform. Passed on the know-how to other team members after project kick-off.

**DEGORDIAN** Software Engineering Intern, Backend Sep 2013 − Jun 2015 Zagreb, Croatia Worked on the backend of a realtime media monitoring service, Mediatoolkit , in C++, Java and PHP. Infrequently performed simple sysadmin tasks on several CentOS servers.

UNIVERSITY OF ZAGREB Student Assistant Oct 2011 — Jun 2015 Zagreb, Croatia

Held office hours for other students and/or supervised laboratory exercises in courses: Computer Aided Design of Electronic Systems, Electronics 1, Communication Networks, Algorithms and Data Structures, Digital Logic, Programming and Software Engineering.

## **EDUCATION & PUBLICATIONS**

UNIVERSITY OF ZAGREB MSc Computer Engineering Sep 2018 Zagreb, Croatia

Master thesis Deep Learning Accelerator for FPGA-based Heterogeneous System with RISC-V Processor

**LULEÅ UNIVERSITY OF TECHNOLOGY** MSc Space Instrumentation Nov 2017 Kiruna, Sweden

University of Würzburg

1st semester of 2015/2016 Würzburg, Germany

Mactarthagia - Chicia Luke Alexa Damie M. La Charge T. "Crawdowning CNICS Language Patartian and Lacalization."

Master thesis Strizic, Luka, Akos, Dennis M., Lo, Sherman, "Crowdsourcing GNSS Jammer Detection and Localization", Proceedings of the 2018 International Technical Meeting of The Institute of Navigation, Reston, Virginia,

January 2018, pp. 626-641.

VISTA Designed and implemented a GPS payload for a student-built sounding rocket, SERA 3, that was success-

fully launched on April 26<sup>th</sup> 2017 from the Esrange Space Center in Kiruna, Sweden. Lead embedded soft-

ware and PCB/electronics design.

Luka Strizic, Guillem Antoja, Hristo Hristov Hristov, Anjana Jegatheesan, Angele Pontoni, Tejaswi Seth, Hilton Woo, "Low Cost Navigational Data Recording Payload for SERA Sounding Rockets", 23rd ESA Sym-

posium on European Rocket and Balloon Programmes and Related Research.

UNIVERSITY OF ZAGREB BSc Computer Engineering Jul 2015 Zagreb, Croatia

Bachelor Thesis L. Strižić and J. Knezović, "Optimization of losless image compression method for GPGPU," 2016 18th

Mediterranean Electrotechnical Conference (MELECON), Lemesos, 2016, pp. 1-6.

Extracurricular Student Representative at the Faculty Council

#### **TALKS**

2019 5<sup>th</sup> annual FantaSTikon fantasy & SF convention 2018 IEEE Croatia Section, Department of Education 2018 3<sup>rd</sup> annual SOELA solar technology conference 2017 Institute of Navigation International Technical Meeting

Navigation in the past, present and future, no recording From UniZg to a Space Oscar, in Croatian ☑

1-on-1 panel discussion guest, in Croatian 🔼

Crowdsourcing GNSS Jamming Detection and Localization, no recording **∠** 

### **HACKATHONS & COMPETITIONS**

**2019 STARTHack hackathon**1st place out of 6 teams in the *Blockchain* track **2018 STEMGames student competition**1st place out of 20 teams in the *Technology Arena* track

2017 European Satellite Navigation Competition 2<sup>nd</sup> place out of 320+ applicants, winner of the *University Challenge* track

2016 CopenHacks hackathon 1st place out of 25 teams, .tech's prize for hosting on .tech domain

**2015 jacobsHack! hackathon** 2<sup>nd</sup> place out of 24 teams, organizer's favourite hack

**2015 Elektrijada student competition** 1<sup>st</sup> place in C++ out of 18 teams, 2<sup>nd</sup> place in C out of 18 teams

2015 Telegram BlackBerry 10 native client contest Runner-up out of 10 teams, awarded 5000 EUR

#### **SKILLS & TECHNOLOGIES**

programming, fullstack development

**Spoken Languages** Croatian native, English C2, German B2, French A1