LUKA STRIZIC

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WORK EXPERIENCE

GOOGLE	Software Engineer	Oct 2018 - Present	Zürich, Switzerland
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Google Shopping team.

AMPHINICY Software Engineering Intern, DSP Jul 2018 - Aug 2018 Zagreb, Croatia **TECHNOLOGIES**

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

Dec 2017 - Mar 2018 **SWIFT NAVIGATION Software Engineering Intern, Firmware** 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 dat-

acenters supporting big products that you've definitely heard of. The result of the internship was successfully deployed into production.

UNIVERSITY OF Visiting Research Scholar Feb 2017 - Aug 2017 Boulder, Colorado, USA **COLORADO BOULDER**

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.

Jun 2016 - Sep 2016 GOOGLE **Software Engineering Intern, Compiler** 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 Student Assistant Oct 2011 - Jun 2015 Zagreb, Croatia ZAGREB

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

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

Strizic, Luka, Akos, Dennis M., Lo, Sherman, "Crowdsourcing GNSS Jammer Detection and Localization", Master thesis

Proceedings of the 2018 International Technical Meeting of The Institute of Navigation, Reston, Virginia,

1st semester of 2015/2016

Würzburg, Germany

January 2018, pp. 626-641.

UNIVERSITY OF WÜRZBURG

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

fully launched on April 26th 2017 from the Esrange Space Center in Kiruna, Sweden. Lead embedded software and PCB/electronics design.

Luka Strizic, Guillem Antoja, Hristo 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

2018 IEEE Croatia Section, Department of Education 2018 3rd annual SOELA solar technology conference 2017 Institute of Navigation International Technical Meeting

From UniZg to a Space Oscar, in Croatian

1-on-1 panel discussion guest, in Croatian

Crowdsourcing GNSS Jamming Detection and Localization, no recording

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HACKATHONS & COMPETITIONS

2018 STEMGames student competition 1st

2017 European Satellite Navigation Competition

2016 CopenHacks hackathon

2015 jacobsHack! hackathon

2015 Elektrijada student competition

2015 Telegram BlackBerry 10 native client contest

1st place out of 20 teams in the *Technology Arena* track

2nd place out of 320+ applicants, winner of the *University Challenge* track

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

2nd place out of 24 teams, organizer's favourite hack

1st place in C++ out of 18 teams, 2nd place in C out of 18 teams

Runner-up out of 10 teams, awarded 5000 EUR

SKILLS & TECHNOLOGIES

Programming Languages
Other Technologies

♥ C, ♥ C++, Java

Under 10k LoC: Python, JavaScript, VHDL, Verilog, PHP, Haskell, Matlab

PCB design, firmware & microcontroller programming, Android app development, CUDA GPGPU programming, fullstack development

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