VLADIMIR NIKOLIĆ

♀ Vancouver, Canada ☑ vladlich@protonmail.com **♀** github.com/schutzekatze

SKILLS

BIOINFORMATICS

Genome Assembly*

Variant Calling

Illumina, Linked Reads

SYSTEMS & EMBEDDED

Linux*, Bash*
Arduino, Raspberry Pi, STM32
Computer Architecture
Basic Electronics

DATA SCIENCE

Deep Learning, Tensorflow Computer Vision, OpenCV Python*, R SQL, PostgreSQL

HIGH PERFORMANCE

C*, C++*, Rust SLURM Large Datasets WEB & MOBILE

Django, Flask HTML, CSS, JavaScript Bootstrap, jQuery Java, Android

LANGUAGES

Serbian (Native speaker)
English (Fluent,
IELTS 8 / CEFR C1)
German (Basic)

EDUCATION

M.Sc. in Bioinformatics

University of British Columbia (<u>ubc.ca</u>)

NSERC-CREATE scholarship awardee

Expected graduation: Spring 2021

Vancouver, Canada Winter 2018 – present

B.Sc. in Software Engineering

University of Belgrade (etf.bg.ac.rs) CGPA: 9.54/10.00, Thesis:

"Cloudiness Estimation using Convolutional Neural Networks".

Belgrade, Serbia Autumn 2013 – Spring 2018

WORK & RESEARCH EXPERIENCE

Intern

Institute of Physics Belgrade Innovation Centre (ic.ipb.ac.rs)

Devised and implemented a custom visual pattern comparison algorithm for the Teslagram project.

Belgrade, Serbia

Spring 2018, Autumn 2018

Co-founder

Startup, Medici Project

Attempted and failed a startup due to team's diverging future plans. The idea was to create a personalized assistant for every day financial tasks.

Belgrade, Serbia Autumn 2017 - Spring 2018

PUBLICATIONS & CONFERENCE PROCEEDINGS

ntJoin: Fast and lightweight assembly-guided scaffolding using minimizer graphs

Bioinformatics (academic.oup.com/...)

Coombe L, **Nikolić V**, Chu J, Birol I, Warren R

Automation of a meteor video network

International Meteor Conference 2018 Proceedings (imo.net/...)

Nikolić V, Golubović S

Pezinok-Modra, Slovakia

Summer 2018

Spring 2020

Cloudiness estimation for video meteor observations

International Meteor Conference 2017 Proceedings (imo.net/...)

Nikolić V, Schröder L, Tešić A

Petnica, Serbia Autumn 2017

OTHER ACTIVITIES

Developer

Personal Project, Arch Setup (github.com/...)

Spring 2017 - present

A set of Bash scripts that automate the setup of various Arch Linux components to make it functional and user friendly.

^{*} Proficient

Developer Autumn 2017 - present

Personal Project, Meteor Observation Notebook (play.google.com/...

An Android application that aids visual meteor observations. Adjusted not to distract at night time and to help later data analysis.

Club member Vancouver, Canada Winter 2018 - Autumn 2019

UBC Orbit (ubcorbit.com)

Member of the UBC Orbit student club whose mission is to build and launch a cubesat capable of capturing images of Earth.

Ostrava, Czech Republic **Participant** Summer 2018

PRACE Summer of HPC (summerofhpc.prace-ri.eu)

Improved the performance of one of the genome assembling stages of the ABySS assembler (github.com/...) with the use of OpenMP and MPI.

Contributor Autumn 2017 - Summer 2018

Open Source, Meteorflux (meteorflux.org)

An open source project by the International Meteor Organization for analysing meteor shower activity. I lead a team of volunteers from Petnica Meteor Group that fixes bugs and adds additional features.

Petnica, Serbia **Participant** Autumn 2017 - Spring 2018

Petnica Summer Institute Machine Learning 2017 (psiml.petnica.rs)

Made All Sky Cloudiness Estimator Project (github.com/...) software package that outlines night sky clouds in All Sky images for the purposes of video meteor observations.

Presented at International Meteor Conference 2017.

Awarded 3rd place on IEEESTEC - 10th International Students Projects Conference.

Member of the local organizing committee

International Meteor Conference 2017 (imo.net/...)

Helped organize the conference, introduce attendees, and provide technical support.

Student Demonstrator Belgrade, Serbia Autumn 2014 - Autumn 2017

Petnica, Serbia

Autumn 2017

University of Belgrade (etf.bg.ac.rs) Overseeing laboratory practices and grading students' assignments.

Student Mentor Belgrade, Serbia

University of Belgrade (etf.bg.ac.rs)

Introducing and helping out freshmen with university's organization and classes.

Autumn 2015 - Autumn 2016

INTERESTS & HOBBIES

Nature & Urban Exploring • Rock climbing • Parkour • Snowboarding • Soft Martial Arts • Meteor Observation