

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*)

★ Proficient

EDUCATION

M.Sc. in Bioinformatics

University of British Columbia (ubc.ca)

Grade Avg: 88.3%, Thesis:

"Scalable methods for improving genome assemblies"

NSERC-CREATE scholarship awardee

Vancouver, Canada

Winter 2018 – Spring 2021

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

Spring 2020

Automation of a meteor video network

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

Nikolić V, Golubović S

Pezinok-Modra, Slovakia

Summer 2018

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

Spring 2017 – present

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

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

Developer

Autumn 2017 – present

Personal Project, Meteor 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

UBC Orbit (ubcorbit.com)

Winter 2018 – Autumn 2019

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

Participant

Ostrava, Czech Republic

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

Summer 2018

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.

Participant

Petnica, Serbia

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

Autumn 2017 – Spring 2018

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 IEEEESTEC - 10th International Students Projects Conference.

Member of the local organizing committee

Petnica, Serbia

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

Autumn 2017

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

Student Demonstrator

Belgrade, Serbia

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

Autumn 2014 – Autumn 2017

Overseeing laboratory practices and grading students' assignments.

Student Mentor

Belgrade, Serbia

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

Autumn 2015 – Autumn 2016

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

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INTERESTS & HOBBIES

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