

VLADIMIR NIKOLIĆ

📍 Vancouver, Canada ✉ vladlich@protonmail.com 🌐 github.com/schutzekatzte

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)
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/...](http://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/...](http://imo.net/))
Nikolić V, Golubović S

Pezinok-Modra, Slovakia
Summer 2018

Cloudiness estimation for video meteor observations

International Meteor Conference 2017 Proceedings ([imo.net/...](http://imo.net/))
Nikolić V, Schröder L, Tešić A

Petnica, Serbia
Autumn 2017

OTHER ACTIVITIES

Developer

Personal Project, Arch Setup ([github.com/...](http://github.com/))
A set of Bash scripts that automate the setup of various Arch Linux
components to make it functional and user friendly.

Spring 2017 – present

Developer <i>Personal Project, Meteor Observation Notebook (play.google.com/...)</i> An Android application that aids visual meteor observations. Adjusted not to distract at night time and to help later data analysis.	Autumn 2017 – present
Club member <i>UBC Orbit (ubcorbit.com)</i> Member of the UBC Orbit student club whose mission is to build and launch a cubesat capable of capturing images of Earth.	Vancouver, Canada Winter 2018 - Autumn 2019
Participant <i>PRACE Summer of HPC (summerofhpc.prace-ri.eu)</i> Improved the performance of one of the genome assembling stages of the ABySS assembler (github.com/...) with the use of OpenMP and MPI.	Ostrava, Czech Republic Summer 2018
Contributor <i>Open Source, Meteorflux (meteorflux.org)</i> 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.	Autumn 2017 - Summer 2018
Participant <i>Petnica Summer Institute Machine Learning 2017 (psiml.petnica.rs)</i> 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.	Petnica, Serbia Autumn 2017 - Spring 2018
Member of the local organizing committee <i>International Meteor Conference 2017 (imo.net/...)</i> Helped organize the conference, introduce attendees, and provide technical support.	Petnica, Serbia Autumn 2017
Participant <i>Petnica Meteor Astronomy Summer School (meteori.rs)</i> Learned about meteor astronomy and visual meteor observation. Implemented a 3D physics simulation in C++ and its visualization in Python of ballistic aggregation.	Petnica, Serbia Summer 2017
Engineering Team Member <i>University of Belgrade (etf.bg.ac.rs), Mewps Project</i> A robot platform that utilizes Raspberry Pi and Arduino. Capable of tracing and moving towards sound sources. Originally a hobby project, later supervised by my microprocessor systems professor Saša Stojanović.	Belgrade, Serbia Autumn 2016 - Spring 2017
Participant <i>EDIT Summer School 2016 (edit.world)</i> Made an augmented reality Android app that is capable of rendering 3D models of preset textbook pictures as they appear on the camera. Awarded as the best participant.	Belgrade, Serbia Summer 2016
Student Demonstrator <i>University of Belgrade (etf.bg.ac.rs)</i> Overseeing laboratory practices and grading students' assignments.	Belgrade, Serbia Autumn 2014 - Autumn 2017
Student Mentor <i>University of Belgrade (etf.bg.ac.rs)</i> Introducing and helping out freshmen with university's organization and classes.	Belgrade, Serbia Autumn 2015 - Autumn 2016

INTERESTS & HOBBIES

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