VLADIMIR NIKOLIĆ

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SKILLS

BIOINFORMATICS	SYSTEMS & LOW LEVEL	DATA SCIENCE
Genome Assembly	Linux, Bash	Deep Learning, Tensorflow
Variant Calling	C, C++, Rust, x86, ARM	Computer Vision, OpenCV
Illumina, Linked Reads	Arduino, Raspberry Pi, STM32	Python
	Computer Architecture	SQL, PostgreSQL
	Basic Electronics	

COLLABORATION	WEB & MOBILE	LANGUAGES
UML	Python, Django, Flask	Serbian *(Native speaker)*
Git	Bootstrap, jQuery	English *(Fluent, IELTS 8 / CEFR C1)*
LaTeX	HTML, CSS, Javascript	German *(Basic)*
	Java, Android	

EDUCATION

University of British Columbia, Faculty of Science (ubc.ca)   Vancouver, Canada
MSc in Bioinformatics   Winter 2018 – present

University of Belgrade, School of Electrical Engineering (etf.bg.ac.rs)   Belgrade, Serbia
BSc in Software Engineering   Autumn 2013 – Spring 2018
    CGPA: 9.54/10.00, Thesis:
    "Cloudiness Estimation using Convolutional Neural Networks".

PUBLICATIONS & CONFERENCE PROCEEDINGS

International Meteor Conference 2018 Proceedings (imo.net/...)   Pezinok-Modra, Slovakia
"Automation of a meteor video network"   Summer 2018
    Nikolić, V; Golubović, S;

International Meteor Conference 2017 Proceedings (imo.net/...)   Petnica, Serbia
"Cloudiness estimation for video meteor observations"   Autumn 2017
    Nikolić, V; Schröder, L; Tešić, A;

WORK & RESEARCH EXPERIENCE

Institute of Physics Belgrade Innovation Centre (ic.ipb.ac.rs)   Belgrade, Serbia
Internship, Teslagram Project   Spring 2018, Autumn 2018
(Computer Vision, OpenCV, C++, High Performance Computing)
    Devised and implemented a custom visual pattern comparison
    algorithm and administrated the local Paradox supercomputer.

PRACE Summer of HPC (summerofhpc.prace-ri.eu)   Ostrava, Czech Republic
Internship, ABySS Assembler (github.com/...)   Summer 2018
(C++, High Performance Computing, Bioinformatics)
    Improved the performance of one of the genome assembling
    stages, Sealer, with the use of OpenMP and MPI.

Open Source   Autumn 2017 - Summer 2018
Contributor, Meteorflux Project (meteorflux.org)
(Python, Flask, Bootstrap, jQuery, AWS, Leadership)
    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.

Startup   Belgrade, Serbia
Co-founder, Medici Project   Autumn 2017 - Spring 2018
(Finance, Android, OpenCV, Machine Learning, Python, Django)
    Attempted and failed a startup. The idea was to create a
    personalized assistant for every day financial tasks. Failed due to
    team's diverging future plans.

Petnica Summer Institute Machine Learning 2017 (psiml.petnica.rs)
Participant, All Sky Cloudiness Estimator Project (github.com/...)
(Python, Tensorflow, OpenCV)
    A 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.

Petnica, Serbia
Autumn 2017 - Spring 2018

OTHER ACTIVITIES

UBC Orbit (ubcorbit.com)
Aspectu Project
(C++, STM32, FreeRTOS)
    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

Personal Project
Meteor Observation Notebook (play.google.com/...)
(Android, Java)
    An Android application that aids visual meteor observations.
    Adjusted not to distract at night time and to help later data
    analysis.

Autumn 2017

International Meteor Conference 2017 (imo.net/...)
Member of the local organizing committee
(Organization)
    Helped organize the conference, introduce attendees and provide
    technical support.

Petnica, Serbia
Autumn 2017

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

Spring 2017

University of Belgrade, School of Electrical Engineering (etf.bg.ac.rs)
Student Mentor
(Soft Skills)
    Introducing and helping out freshmen with university's
    organization and classes.

Belgrade, Serbia
Autumn 2015 - Autumn 2016

University of Belgrade, School of Electrical Engineering (etf.bg.ac.rs)
Student Demonstrator
    Overseeing laboratory practices and grading students'
    assignments.

Belgrade, Serbia
Autumn 2014 - Autumn 2017

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INTERESTS & HOBBIES

Nature and Urban Exploring • Freeclimbing • Parkour • Snowboarding • Soft Martial Arts • Meteor
Observation