Nikola Jovanović

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Date of birth: 8th November 1996

Education:

- **School of Electrical Engineering, University of Belgrade** — Belgrade, Serbia
  Software Engineering Department, 4th Year — 2015 – present
  Average mark: 9.46 / 10.0
- **IX Belgrade Gymnasium "Mihailo Petrovic Alas"** — Belgrade, Serbia
  Natural Sciences and Mathematics Department — 2011 – 2015
  Average mark: 4.7 / 5.0

Skills and certifications:

- Experienced in: C/C++, Python and Java
- English level C1 (CAE - *Cambridge Advanced English* certificate) — June 2016

Work experience:

- **Research Fellow**, Rice University — Houston, Texas, US — June 2018 – September 2018
  - Participated on a project which aims to speed up OpenIFS weather simulations by using neural networks instead of CFD algorithms
  - Worked on preprocessing training and test data using PCA compression
- **Software Engineering Intern**, Microsoft Development Center Serbia — Belgrade, Serbia — August 2017 – December 2017
  - Worked in "Havok" physics engine team, which is developing high performance particle sub-engine
  - Migrated deprecated demos to the new platform
  - Implemented basic fluid simulation and rendering utility
- **Assistant at Petnica Science Center**, Computer Science department — Valjevo, Serbia — January 2017 – present
  - Giving lectures on CS topics (Python, machine learning)
  - Mentoring participants' projects

Projects:

- "Gravity Crusher" real time multiplayer web game – University project — March 2018 – June 2018
  - Demonstration of project lifecycle with extensive documentation and testing
  - Used technologies: Node.js (http and socket servers), MySQL, Bootstrap, JavaScript, WebGL (game rendering)
  - https://github.com/NikolaJov96/GravityCrusher
- Virtual memory manager simulation – University project (c++) — December 2017
  - Supporting shared memory segments, multiple page swapping algorithms, process cloning with copy-on-write and threshing preemption
- Multithreaded OS kernel with time sharing – University project (bcc compiler) — April 2017 – June 2017
  - Low level implementation of threads, semaphores, preemptive context switching, event (interrupt) handlers and thread communication signals

Competitions:

- EESTech Challenge ML hackathon – international round in Novi Sad, Serbia — May 2018
  - 2nd place, developed Spark scripts for analyzing provided costumer data
- EESTech Challenge ML hackathon – international round in Zurich, Switzerland — May 2017
  - Team developed solution for detection and recognition of different cows on the picture, with provided very limited training set