

CURRICULUM VITAE

ANDREJ IVAŠKOVIĆ

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WORK EXPERIENCE

- Jul–Sep 2018** Software Engineer Intern,
Improbable Worlds Limited, London
I worked on SpatialOS GDK for Unity, a plugin that enables the usage of SpatialOS, a platform for creating highly scalable distributed applications, inside the Unity game engine. I also spent time working with the in-house game development team by creating tools for their artists and game designers.
- Jul–Sep 2017** Site Reliability Engineering Intern,
Google, London
I was a member of the SRE team supporting advertiser products like AdWords and AdSense. I developed a simulation framework for a complex orchestration system that sequences automation changes in production.
- Jul–Sep 2016** Research Intern,
University of Cambridge Computer Laboratory, Cambridge
I was working with Dr Thomas Sauerwald on the project ‘Dynamics of Multiple, Interacting and Concurrent Markov Chains’ funded by the European Research Council, which aimed to explore new algorithms based on multiple random walks that are able to cope with massive and complex data sets. I researched the general mathematical theory of multiple Markov chains, which resulted in a conference paper at STACS.
- Jul–Sep 2015** Intern Software Design Engineer,
Microsoft Development Center Serbia, Belgrade,
I was a member the Microsoft SQL Server Engine team that introduced JSON support to Microsoft SQL Server.

EDUCATION

- 2018–present** PhD in Computer Science, Department of Computer Science and Technology,
University of Cambridge
I am researching effect and coeffect systems, with a particular focus on exploring notions of context-dependent programming and possible extensions to programming languages. I expect to submit my PhD thesis in the summer of 2021.
I am also a supervisor at the University of Cambridge, and I hold small group teaching sessions on various topics, including Algorithms, Computation Theory, Complexity Theory, Introduction to Graphics. I supervised students from a variety of Cambridge colleges.
Member of Trinity College.
- 2014–2018** Computer Science Tripos, Trinity College, University of Cambridge
Bachelor of Arts / Master of Engineering
Passed with distinction (First) in fourth year
First Class in third year
Rank 2 out of 101 in second year examinations, First Class
Rank 1 out of 101 in first year examinations, First Class
- 2010–2014** Matematička gimnazija, Belgrade
Graduated with a 5.0 (maximum) grade point average

SKILLS

- **Programming skills:**
 - significant experience with C, C++, C[#], Java, Python, SQL, OCaml, Haskell;
 - experience with SQL (Oracle certificate: Database Design and Programming with SQL), bash, Prolog and the Arduino platform.
- Experienced L^AT_EX and TikZ typesetter.
- Well versed in solving mathematical and algorithmic problems. Great understanding of probability, statistics and data science.
- **Languages:** Serbian (native speaker), English (fluent speaker), French (B1 certificate from University of Cambridge Language Centre).

PUBLICATIONS

- Andrej Ivaskovic, Adrian Kosowski, Dominik Pajak, Thomas Sauerwald, *Multiple Random Walks on Paths and Grids*, 34th International Symposium on Theoretical Aspects of Computer Science (STACS), 8–11 March 2017
- Petar Veličković, Andrej Ivašković, Stella Lau, Miloš Stanojević, *Viral: Real-world competing process simulations on multiplex networks*, Belgrade BioInformatics Conference (BelBI), 20–24 June 2016

PROJECTS

- Master's project: *Deny-guarantee reasoning in the presence of a heap*.
- Bachelor's project: *Reinforcement learning for automated theorem proving*.
- Won second prize at *Hack Cambridge Recurse (2017)*, worked on project *ctrl-f-vision* with Jawwad Farid, Osman Ramadan and Evgeny Roskatch. The application is supposed to help users retrieve the most recent frames of a continuous video stream in which an object of interest was detected, with object detection performed using deep learning with TensorFlow.
- Finalist in *Hack Cambridge (2016)*, worked on project *Viral* with Stella Lau, Petar Veličković, and Miloš Stanojević. The application runs a centralised server that receives location data from Android devices and uses it to model the spread of epidemics, thus providing researchers in the field of multiplex networks with real-world data.
- Won first prize in the 2nd *mt:s Android Contest* (organised by Telekom Srbija) with Miloš Stanojević for creating the app *Gone Horribly Wrong* for Android devices. *Gone Horribly Wrong* is a puzzle platforming game available on Google Play and currently completely owned by Telekom Srbija. Attended *Mobile World Congress 2013* as a prize.

SELECTED AWARDS AND SCHOLARSHIPS

- Recipient of the Trinity College *Internal Graduate Scholarship* (IGS), providing full funding for my PhD studies.
- A *Cambridge Trust* and a recipient of the *Trinity College Overseas Bursary* from 2014 until 2018, which provided complete funding for tuition fees and living costs during my undergraduate degree.
- Received commendation as an undergraduate supervisor in the sciences in the *Student-led Teaching Awards*, by the Cambridge University Student Union (CUSU) in 2019, and the *New Wiseman Prize*, by the Departments of Computer Science and Technology.
- Recipient of the *G-Research Prize* in 2015 for being the top student of Part IA Computer Science Tripos at the University of Cambridge.
- Participated in international algorithmic problem solving contests as a secondary school student: *International Olympiad in Informatics* (in 2012 and 2014), *Balkan Olympiad in Informatics* (in 2012 and 2014, won a bronze medal in 2014), *International Zhautykov Olympiad* (2014, won a bronze medal).