

# Emil Emilov Indzhev

## EDUCATION

- 2018 – PRES. **St Catherine's College, University of Oxford, UK**  
*BSc & MSc Computer Science*  
*First year grade: 85.75/100*  
*First year rank: 2<sup>nd</sup> place*
- 2013 – 2018 **Baba Tonka Upper Secondary Mathematical School, Bulgaria**  
*Secondary Education*  
*Final grade: 5.91/6*

## WORK EXPERIENCE

JULY 2019 – SEPTEMBER 2019

Ocado Technology

### *Software Engineer, Intern*

Part of the Machine Learning Research team in Sofia. Worked on a reinforcement learning project about training a robotic arm. Added features to the company branch of the Robosuite simulator.

SEPTEMBER 2018 – FEBRUARY 2019

Musala Soft

### *Software Developer*

Developing algorithmic problems for and generally managing Musala Soft's international programming competition CodeIT.

ONGOING

Informatics Competitions

### *Problem Setter*

Frequently setting problems for Bulgarian national and international competitions such as IATI.

## PERSONAL PROJECTS

### *Kigurai*

A machine learning library for C++ built from scratch. Supports the most common types of networks such as CNNs. Still is a work in progress.

### *Evolving Snakes*

Snakes in an environment similar to the classical game Snake are controlled by neural networks and can reproduce. The snakes evolve, while varying emergent behaviors arise.

### *Physics Simulation*

Physics simulation made up of basic building blocks. Complex physical phenomena, such as wave diffraction and electric dipoles, appear without being pre-programmed in the simulation.

### *IUPAC Name Generator*

Generates the scientific names of complex organic compounds according to the IUPAC specifications.

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## ACHIEVEMENTS AND AWARDS

- 2017 **International Autumn Tournament in Informatics**  
*Bronze Medal*
- 2017 **International Linguistics Olympiad**  
*Bronze Medal*
- 2016 **International Autumn Tournament in Informatics**  
*Bronze Medal*
- 2015 **Balkan Olympiad in Informatics**  
*Bronze Medal*
- 2014 **Junior Balkan Olympiad in Informatics**  
*Gold Medal*
- 2014 **International Conference on Computer Systems and Technologies**  
*Crystal Prize for Best Paper*
- 2018 **National Olympiad in Linguistics**  
*Silver Medal*
- 2018 **Spring Competition in Informatics**  
*Gold Medal*
- 2018 **National Olympiad in Physics**  
*Laureate*
- 2018 **National Olympiad in Informatics**  
*Gold Medal*
- 2017 **Autumn Competition in Physics**  
*Silver Medal*
- 2017 **Young Physicists' Tournament**  
*First Place, with team Perun*

## SOFTWARE SKILLS

LANGUAGES	C++, C#, Python, Haskell, JavaScript, Scala
LIBRARIES	OpenGL, GLFW, PyAudio
PLATFORMS	Windows, Linux
OTHER	LaTeX, Microsoft Office

## LANGUAGE SKILLS

BULGARIAN	Native
ENGLISH	Fluent, IELTS Academic with 8/9
ESPERANTO	Basic
GERMAN	Basic