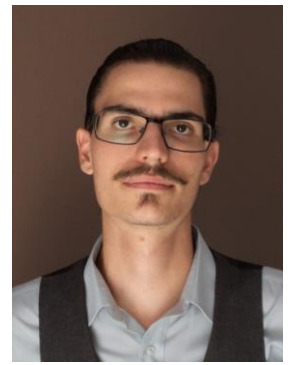


# János Juhász



## PERSONAL INFORMATION

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Address 4 Angyal Street, Vecsés, Hungary, H-2220  
Date/Place of birth June 3, 1989, Budapest, Hungary  
Nationality/Citizenship Hungarian

## SKILLS

- Programming in Matlab, Python, R (basics), C++ (basics).
- Engineering and life science cross-disciplinary thinking.
- Supervising research of BSc and MSc students.
- Tutor of first year students at the University (Animátor community)
- Experience in teaching practical courses of Differential equations in biology, Theory of nonlinear dynamic systems, Molecular biology, Introduction to bioinformatics, Linear algebra, and Functional analysis.

## PROFESSIONAL INTERESTS

- bacterial communication and cooperation
- microbial communities
- individual/agent-based modelling
- quantitative/computational biology
- systems biology
- bioinformatics

## EDUCATION AND TRAINING

- 2015–  
PhD in Roska Tamás Doctoral School of Science and Technology, Pázmány Péter Catholic University Faculty of Information Technology and Bionics, Budapest,  
Research topics: Modelling of microbial communities,  
Thesis advisor: Prof. Sándor Pongor
- 2013–2015  
MSc in Medical Biotechnology, Pázmány Péter Catholic University Faculty of Information Technology and Bionics, Semmelweis University, Budapest,  
Thesis title: Agent based modelling of bacterial horizontal gene transfer, Thesis advisor: Prof. Sándor Pongor.
- 2013 (June)  
Theoretical and Practical Course in Bioinformatics, International Centre for Genetic Engineering and Biotechnology, Trieste

- 2011 (July–August) International Biology Undergraduate Summer School, UZH and ETH Zürich, Project title: 4-D reconstruction of *Drosophila* pupal trachea from X-ray tomography data. Supervisor: Dr. Christoph. Aegerter
- 2009–2013 BSc in Molecular Bionics, Pázmány Péter Catholic University, Faculty of Information Technology, Budapest, Thesis title: Agent based modelling of bacterial communication and cooperation, Thesis advisor: Prof. Sándor Pongor.

## LANGUAGE SKILLS

Hungarian	native
English	Advanced (C1) language exam (2009)
Latin	Intermediate (B2) language exam (2009)

## PUBLICATIONS

**J. Juhász**, A. Kertész-Farkas, D. Szabó, and S. Pongor, “Emergence of collective territorial defense in bacterial communities: horizontal gene transfer can stabilize microbiomes.” *PLoS One*, vol. 9, no. 4, p. e95511, Jan. 2014.

**J. Juhász**, Modelling horizontal gene transfer in bacterial communities, *PhD Proceedings Annual Issues of The Doctoral School Faculty of Information Technology and Bionics* 2015/01, pp. 53-56., 2015.

S. Pongor, **J. Juhász**, B. Ligeti, “Valós és virtuális társadalmak a baktériumoknál” (Real world and virtual societies in bacteria), *Élet és Tudomány*, vol. 71, no. 2, pp. 41-43., Jan. 2016. (in Hungarian)

S. Pongor, **J. Juhász**, B. Ligeti, “Háború és béke a baktériumoknál” (War and peace in bacteria), *Természet Világa*, vol. 147, no. 5, May. 2016. (in Hungarian)

Budapest, 04. 23. 2016.