

Rumen Stamatov

A software engineer with deep curiosity about science.

✉ rstamatov@gmail.com

☎ 0898449507

🌐 www.rstamatov.eu

Work experience

06/2014 - 05/2019

Hardware Verification Engineer

Broadcom

Implementation of software reference model tools, used for simulating internet traffic and verifying the RTL-logic of hardware devices. The languages used were C++, SystemVerilog, Perl and Python.

11/2012 - 05/2014

Research Assistant

Duke University

Took part in a research project on paralogous transcription factors. We were interested in how factors with similar structure have different targets. We used computational methods and modern Molecular Biology techniques.

02/2010 - 05/2012

Research Assistant

University of Pennsylvania

We were interested in the localization of the Aurora B kinase, which is important for regulating the fidelity of chromosome segregation during cell division. We used *in vitro* experiments, light microscopy and mathematical modeling of enzyme kinetics.

Skills & Competences

- Software development
- Lab techniques
- Scientific writing
- Big data analysis
- Web design
- Creativity

Achievements and Awards

- Honorary Graduation (Magna Cum Laude) - UPenn (2012) - for high GPA
- Frank and Sara McKnight award in the life sciences - for achievements in academic research

Education

09/2012 - 05/2014

Master of Bioinformatics

Duke University (Durham, NC)

08/2008 - 05/2012

Bachelor of Bioinformatics

University of Pennsylvania (Philadelphia, PA)

07/2010 - 11/2010

Exchange program in Tropical Biology

James Cook University (Queensland, Australia)

Publications

- Zaytsev, A. V., Segura-Peña, D., Godzi, M., Calderon, A., Ballister, E. R., Stamatov, R., et al. (2016). Bistability of a coupled Aurora B kinase-phosphatase system in cell division., *Elife* 5:e10644. doi: 10.7554/eLife.10644
- Y Tanouchi, A Pai, H Park, S Huang, R Stamatov, NE Buchler, L You (2015) A noisy linear map underlies oscillations in cell size and gene expression in bacteria, *Nature* 523 (7560), 357

Personal projects and interests

- Computational investing - I use technical and fundamental analysis for stock trading.
- Artificial intelligence - actively learning.
- Track and field - I compete as a long-distance runner.

Languages

- Bulgarian (native)
- English (fluent)
- Spanish (advanced)