

# Daniel Siladi (Szilágyi Dániel)

Computer Science Student  
École normale supérieure de Lyon

## Contact

E-mail: daniel.szilagyi@ens-lyon.fr  
Mobile: +381 (0)64 973 9508

## Education

- **École normale supérieure de Lyon** Lyon, France  
*Fundamental Computer Science* 2017 - present
  - Finished the first year at the top of the class
- **University of Primorska** Koper, Slovenia  
*Mathematics BSc* 2014 - 2017
  - Graduated with GPA: 10.00
  - Bachelor thesis title: “Computational methods for polypeptide origami design”
- **Gimnazija Jovan Jovanović Zmaj** Novi Sad, Serbia  
*High school* 2010 - 2014
  - Class specialized for mathematics, physics and computer science
  - GPA: 5.00/5.00
  - Final year project: “Some applications of group theory”
- **Osnovna škola pri gimnaziji Jovan Jovanović Zmaj** Novi Sad, Serbia  
*Elementary School* 2008 - 2010
  - Spent last two years of elementary education in an experimental class specialized for mathematics, physics and computer science
  - GPA: 5.00/5.00
- **Osnovna škola Jovan Popović** Novi Sad, Serbia  
*Elementary School* 2002 - 2008
  - Finished first six grades before moving to the experimental class
  - GPA: 5.00/5.00

## Experience

- **LIP, École normale supérieure de Lyon** Lyon, France  
*Research Intern* 2018
  - Three month summer internship
  - Worked on algorithmic aspects of quantum information theory, with prof. Omar Fawzi
- **Microsoft Development Center Serbia** Belgrade, Serbia  
*Data Science Intern* 2016
  - Three month summer internship
  - Worked on modeling and forecasting SQL Server performance
- **ELTE Summer School of Mathematics** Budapest, Hungary  
*Participant, Discrete Algorithms and Applications* 2016
- **Petnica Summer Institute of Machine Learning** Petnica, Serbia  
*Participant* 2015
  - Machine learning summer school organized by Microsoft Development Center Serbia

- Worked on developing a model for local business classification, using logistic regression on real-world data from the Bing search engine

- **Summer School of Science** Požega, Croatia  
*Project mentor* 2015
  - Mentored a team of 3 high school students on a project where they developed a system for near real time indoor positioning using a few Bluetooth low energy beacons, and a smartphone.
- **Petnica Science Center** Petnica, Serbia  
*Teaching Assistant at the Physics Seminar* 2015 - present
- **PKP project *Absorption of foreign substances in the sea*** Koper, Slovenia  
*Student project organized by the University of Primorska* 2015
  - Worked as a part of a team, designing and manufacturing the housing and electronics for an underwater data-collection module
- **Petnica Science Center** Petnica, Serbia  
*High School science projects* 2011 - 2014
  - Daniel Siladi, Ognjen Stanisavljević: “*Simulation of pedestrian traffic in evacuation situations*”. Mentored by Miroslav Bogdanović, and presented at the annual Petnica Autumn Conference in 2014.
  - Daniel Siladi, Kristina Siladi: “*Embedding graphs in books*”. Mentored by Stefan Mihajlović, and presented at the annual Petnica Autumn Conference in 2013.
  - Daniel Siladi: “*Simulating fluids in two dimensions*”. Presented at the annual Petnica Autumn Conference in 2012.
  - Daniel Siladi: “*Genetic Algorithms and the Travelling-Salesman Problem*”. Presented at the annual Petnica Autumn Conference in 2011.
  - All 4 papers have been or will be published in the respective conference proceedings (*Petničke Sveske*)
- **Višnjan Summer School of Science** Višnjan, Croatia  
*Science/engineering project* 2014
  - Worked as a part of a team and built a fully functional remotely operated underwater vehicle
  - Programmed the data collection and motor controller modules
- **Modern Mathematics International Summer School for students** Bremen, Germany  
*Mathematics summer school for high school and university students* 2013

## Competitions and awards

- **NASA SpaceApps challenge** Koper, Slovenia  
*Global 48h programming hackathon, organized by NASA* 2016
  - Second place, qualified into the Central European round
  - Designed and built an end-to-end machine learning-based solution for predicting flight delays based on meteorological data
  - Joint work with Edin Husić, Marko Palanetić, Marko Prač, Marko Rajković and Vladan Jovičić
- **Russian Open Internet Olympiad** Koper, Slovenia  
*Bronze medal in computer science* 2016
- **ACM Central Europe Regional Contest** Zagreb, Croatia  
*Team programming competition* 2015-2016
- **University Programming Marathon** Slovenia  
*National qualifications for the ACM regionals* 2015 - present
  - University champion for 2015 and 2016

- **Serbian national competitions** Serbia  
*Informatics, Mathematics, Physics* 2010 - 2014
  - Regularly competed in mathematics, physics and informatics competitions, up to the national level
  - **Informatics (Computer Science):** Serbian Olympiad in Informatics (2014 – second prize, 2012, 2011 – third prize), National Competition (2014, 2011 – second prize, 2012 – honorable mention)
  - **Mathematics:** National Competition 2012 – honorable mention
  - **Physics:** National Competition 2012 – honorable mention
- **Diplomas at the end of High School** Novi Sad, Serbia  
*Awarded at the graduation ceremony* 2014
  - Vuk Karadžić award for 5.00/5.00 GPA
  - Special Diplomas for successfully participating mathematics, physics and computer science competitions during high school
  - Jovan Jovanović Zmaj plaque, awarded to the best student in the generation
  - Dušan Kešelj plaque, awarded to the most distinguished student in the area of informatics in the generation
- **Energija Znanja scholarship** Serbia  
*One year monthly scholarship awarded by NIS* 2013 - 2014
- **KöMaL's informatics problem solving contest** Budapest, Hungary  
*Correspondence contest organized by KöMaL (Középiskolai Matematikai és Fizikai Lapok)* 2011 - 2013
  - Placed on the 5th place at the end of both 2012 and 2013
  - Invited twice to the annual conference organized at Eötvös Loránd Tudományegyetem (ELTE) for the best competitors in mathematics, informatics and physics
- **Dositeja Award** Serbia  
*Awarded by the Ministry of Education for exceptional results at competitions* 2011, 2012

## Publications and conferences

- **Construction of an orthogonal CC-set** Koper, Slovenia  
*Middle-European Conference on Applied Theoretical Computer Science (MATCOS)* 2016
  - Joint work with Andrej Brodnik, Marko Palanetić, Vladan Jovičić
- **Two Tales from the Applied Combinatorial Optimization** Budapest, Hungary  
*29th Conference of the European Chapter on Combinatorial Optimization* 2016
  - Presented as an invited talk by Andrej Brodnik
  - Joint work with Ajasja Ljubetič, Andrej Brodnik, Marko Palanetić, Roman Jerala, Vladan Jovičić

## Skills

- **Mathematics**, in particular discrete mathematics and **graph theory**, **numerical methods**
- Working knowledge of various **programming languages**: C/C++, Python, C#, Java, Pascal, SQL, Prolog, Assembler (x86 in particular), MATLAB, Mathematica
- Strong knowledge of **data structures and algorithms**, as well as some background in **theoretical computer science**
- **Other technologies**: L<sup>A</sup>T<sub>E</sub>X, Unix administration, Git, Microsoft Office
- **Piano** – played it during elementary and higher education, obtained basic music theory knowledge

- **Karate** – blue belt (5th kyu)

## Languages

- **Serbian, Hungarian:** Native
- **English:** Fluent (Cambridge CPE diploma, CEFR level C2)
- **Slovenian:** Working knowledge
- **French:** Intermediate (CEFR level B1 certificate)
- **German, Russian** Basic