Szilágyi Dániel (Daniel Silaði)

Computer Science Student École normale supérieure de Lyon Contact

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Education

École normale supérieure de Lyon

Master studies, Theoretical Computer Science

Lyon, France 2017 - present

- Finished the first year at the top of the class
- Awarded the Ampère excellence scholarship for both years

University of Primorska

 $Mathematics\ BSc$

Koper, Slovenia 2014 - 2017

- Graduated with GPA: 10.00
- Bachelor thesis title: "Computational methods for polypeptide origami design"

Gimnazija Jovan Jovanović Zmaj

High school

Novi Sad, Serbia

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

Elementary School

Novi Sad, Serbia

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

Elementary School

Osnovna škola Jovan Popović

Novi Sad, Serbia

2002 - 2008

- Finished first six grades before moving to the experimental class
- GPA: 5.00/5.00

Experience

IRIF, Université Paris Diderot

Research Intern

Paris, France 2019 - present

- Second semester internship
- Worked on quantum machine learning, with prof. Iordanis Kerenidis

LIP, École normale supérieure de Lyon

 $Research\ Intern$

Data Science Intern

Lyon, France

2018

- Three month summer internship
- Worked on algorithmic aspects of quantum information theory, with prof. Omar Fawzi

Microsoft Development Center Serbia

Belgrade, Serbia

2016

- Three month summer internship
- Worked on modeling and forecasting SQL Server performance

ELTE Summer School of Mathematics

Participant, Discrete Algorithms and Applications

Budapest, Hungary 2016

Petnica Summer Institute of Machine Learning

Participant

Petnica, Serbia 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 Silađi, Kristina Silađi: "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 Palangetić, Marko Prcać, Marko Rajković and Vladan Jovičić

Russian Open Internet Olympiad

Koper, Slovenia

ACM Central Europe Regional Contest

Team programming competition

Zagreb, Croatia 2015-2016

University Programming Marathon

National qualifications for the ACM regionals

Slovenia 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

2014

Awarded at the graduation ceremony

- 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 Palangetić, 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 Palangetić, 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
- \bullet Other technologies: IATEX, 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)

• French: Fluent

• Slovenian: Working knowledge

• German, Russian Basic