

Sanja Šćepanović

+358 45 167 8338

Konemiehentie 2 A138, Espoo, Finland

sanjascepanovic@gmail.com

sanja7s.me

Research interests

Data and network analysis, social computing, social psychology, human dynamics, security/privacy, smart energy

PhD researcher at Aalto Univ., Helsinki

Supervisors: Jukka Nurminen (Aalto Univ.) and Pan Hui (Hong Kong Univ. of Science and Technology, HKUST).

Research topics: Social and information network analysis, human dynamics, energy efficiency in smart cities.

Member of: CIVIS project (civisproject.eu), EIT ICT Labs doctoral school (eitictlabs.eu).

Supervised 2 master thesis; tutor in Seminar on Internetworking (masters) and Bit Bang (doctoral) courses.

Organized Green Campus hackathon as part of green hackathon series (greencampus.greenhackathon.com).

Previous education

Space Studies Program, SSP12 [summer 2012, Grade A]

International Space Univ. (ISU); Florida Institute of Technology and NASA Kennedy Space Centre

MSc, Computer science (double degree) [July 2011, GPA 4.41/5]

Thesis title: Mitigating DDoS attacks with cluster-based filtering (Grade 5/5)

Aalto Univ., Helsinki, Finland (Security and mobile computing)

Univ. of Tartu, Tartu, Estonia (Theoretical foundations of cryptography; distributed computing)

Diploma in Mathematics [July 2008, GPA 9.32/10]

Univ. of Montenegro, Podgorica, Montenegro (Applied mathematics and computer science)

Work experience

[June 2011 - June 2012] Analytics engineer intern

SEVEN Networks, Redwood City, CA, United States

Data analytics and reporting to support the company business intelligence. Developed ETL solutions to track database trends and alert via e-mail.

[March 2009 - Aug. 2009] Analytics engineer, security engineer

Central bank of Montenegro, Podgorica, Montenegro

IT sector: Oracle database system stability, reliability and support team.

Payment sector: worked with RTGS bank Public Key Infrastructure system.

[Oct. 2008 - Feb. 2009] Analytics engineer, software engineer

Railway Transport of Montenegro, Podgorica, Montenegro



Diverse experience, from developing the web site for the company, to supporting the company human resources through reporting and data analytics.

Volunteer Experience

[March 2013 – March 2015] **National Point of Contact for Montenegro Space Generation Advisory Council (SGAC)**

Organized first Space Day in Montenegro (omsa.me/en/projects/open-science-days-2013).

[Dec. 2013 – Sept. 2014] **Deputy executive director Organization of Montenegrins Studying Abroad (OMSA)**

Leader of a team of 20 Points of Contacts representing the organization in different countries. Coordinator of the Neuroscience conference during Montenegrin Open Science Days 2014 (omsa.me/en/projects/odn14).

Skills

Technical:

Languages/scripts – Python, C, Java, SQL, Bash, R, Matlab, HTML/CSS, Tcl, ProVerif, LaTeX

Database – Oracle, PostgreSQL, MySQL, Hadoop, MongoDB

Tools – Eclipse, Pentaho BI suite, VirtualBox, Android SDK, Oracle Developer

Soft skills – event planning and organization, multicultural and interdisciplinary team collaboration/leadership

Languages – Montenegrin (mother tongue), English (fluent), Russian (advanced), Finnish (basic)

Awards and honours

- One Young World 2014 summit All Bar None scholarship for Montenegrin delegate
- Aalto AVP Urban Challenge at Pennsylvania and Pace Univ., and in New York, Sept. 2014
- Award of Merit, 2011, Aalto Univ. School of Science
- Erasmus Mundus scholarship 2009-2011, European Commission
- BEST course on Aeronautics, 2010, Board of European Students of Technology

Published/presented work

Denial-of-service mitigation for Internet services. *Nordic Conference on Secure IT Systems, NordSec 2014*.

Ignite talk: Information diffusion on Twitter based on user homophily and semantic relatedness. *KNOWeSCAPE 2013*.

Revealing the pulse of human dynamics in a country from mobile phone data. *D4D book, NetMob 2013*.

Space -- One giant leap for education. The SSP'12 team project. *Article published in Space Times magazine (April 2013)*.

Poster: Ion Composition Analyzer (Rosetta Spacecraft) – A Temperature Analysis. *16th ISU Annual International Symposium 2012*.

Second best poster award: A3, A secure and energy efficient topology construction protocol for WSN. *Nordic Conference on Secure IT Systems, NordSec 2010*.

Hobbies

Dancing (salsa and acro dance), running; traveling and meeting new cultures; debating; reading on astronomy, space and psychology; reading poetry and novels.

