

PERSONAL INFORMATION

Name Kristina Kostadinović Vranešević
Date / Place of birth Jul 30th 1988 / Užice, Serbia
Address Kraljice Katarine 76, 11030 Beograd
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EDUCATION

2013 - Present **PhD Student**
Faculty of Civil Engineering, Belgrade, Serbia
Department of Engineering Mechanics and Theory of Structures
Exams passed during the first and the second year: 8/8

2011 - 2013 **Master of Science (MSc)**
Faculty of Civil Engineering, Belgrade, Serbia
Department of Construction Engineering (1 year studies)
GPA: 9.29 / 10.0

2007 - 2011 **Bachelor of Science (BSc)**
Faculty of Civil Engineering, Belgrade, Serbia
Department of Construction Engineering (4 year studies)
GPA: 9.04 / 10.0

WORK EXPERIENCE

11/2014 - Present **Teaching assistant**
Faculty of Civil Engineering, Belgrade, Serbia

- Engineering Mechanics 1 | Undergraduate Course
- Engineering Mechanics 2 | Undergraduate Course
- Energy Efficiency and Building Certification | Undergraduate Course

05/2013 - 10/2014 **Steel structures specialist**
DEL ING DOO, Belgrade, Serbia

- Performed structural analysis and design of steel bridges and buildings in line with Serbian Design Code (SRPS), European Design Code (Eurocode) and Russian Design Code (SNiP);
- Prepared all components of project documentation (structural drawings, material specifications, bill of quantities, workshop drawings, plans of installation, contracts);
- Collaborated with architects to meet their demands, provide elegant structural design solutions and communicated with CAD technicians to improve structural design solutions.

PROJECTS FOR REFERENCE

2013

- Research Center "Renova Lab" in Innovation center "Skolkovo", Moscow – Member of the steel construction design team – Main and Detailed design
- Ski lifts for Kopaonik Ski Center in cooperation with Leitner ropeways – Member of design team – Main design

2014

- Pharmaceutical Facility "Teva" in Yaroslavl, Russia – Member of the steel construction design team – Main and Detailed design
- Reconstruction of commercial center for Marriott International, Belgrade – Member of design team – Main and Detailed design of facade, work on the supplementary calculations due to the wind load

PUBLICATIONS AND PRESENTATIONS

M21

- **Kostadinović Vranešević K.**, Šarkić Glumac A.: *Peak pressures on high-rise buildings roof: A dual approach through validated LES and wind tunnel experiments with uncertainty quantification*, Journal of Wind Engineering and Industrial Aerodynamics, Vol. 250, 2024, 105784, doi: 10.1016/j.jweia.2024.105784
- **Kostadinović Vranešević K.**, Ćorić S., Šarkić Glumac A.: *LES study on the urban wind energy resources above the roof of buildings in generic cluster arrangements: Impact of building position*, Journal of Wind Engineering and Industrial Aerodynamics, Vol. 240, 2023, 105503, doi: 10.1016/j.jweia.2023.105503

- **Kostadinović Vranešević K.**, Vita G., Bordas S.P.A., Šarkić Glumac A.: *Furthering knowledge on the flow pattern around high-rise buildings: LES investigation of the wind energy potencial*, Journal of Wind Engineering and Industrial Aerodynamics, Vol. 226, 2022, 105029, doi: 10.1016/j.jweia.2022.105029
- M22** • Hemida H., Šarkić Glumac A., Vita G., **Kostadinović Vranešević K.**, Höffer R.: *On the Flow over High-rise Building for Wind Energy Harvesting: An Experimental Investigation of Wind Speed and Surface Pressure*, Applied Sciences, 10(15), 2020, pp 1-22, doi: 10.3390/app10155283
- M24** • **Kostadinović Vranešević K.**, Gluhović N., Dobrić J., Spremić M.: *Behaviour of thin-walled cylindrical and conical shells – carbon vs. stainless steel*, Građevinski materijali i konstrukcije, broj 1/2019, Beograd, Srbija, 2019, pp 27-41, doi: 10.5937/GRMK1901027K
- M33** • **Kostadinović Vranešević K.**, Šarkić Glumac A.: *Peak Pressure Evaluation on High-Rise Buildings: Insights from Experimental and LES Analyses*, 9th International Colloquium on Bluff Body Aerodynamics and Applications, 29 July - 2 August 2024, University of Birmingham, UK, 2024

• Šarkić Glumac A., Jadhav O., Jočković M., **Kostadinović Vranešević K.**, Bordas S., Blocken B.: *Prediction of the wind flow patterns above different building roof shapes using machine learning techniques*, 9th International Colloquium on Bluff Body Aerodynamics and Applications, 29 July - 2 August 2024, University of Birmingham, UK, 2024

• **Kostadinović Vranešević K.**, Šarkić Glumac A.: *Impact of surroundings on the local peak pressure in high-rise building clusters*, 16th International Conference on Wind Engineering (ICWE16): 27-30 August 2023, Florence, Italy, Proceedings on CD, Italy, 2023

• **Kostadinović Vranešević K.**, Šarkić Glumac A., Bordas S.P.A.: *The influence of exposure on wind flow characteristics around a high-rise building*, 8th European-African conference on wind engineering (8EACWE): 20-23 September 2022, Bucharest: proceedings, Bucharest, Romania, 2022, ISBN: 978-973-100-532-4

• **Kostadinović Vranešević K.**, Glumac A., Hemida H.: *Experimental investigation of wind load on low-rise industrial building*, 7th International Conference: Contemporary Achievements in Civil Engineering 2019, Conference proceedings, Subotica, Srbija, 2019, pp 333-340, ISBN: 978-86-80297-78-1

• **Kostadinović Vranešević K.**, Glumac A., Hemida H.: *Experimental investigation of wind flow around low-rise tilted house*, 7th International Conference: Contemporary Achievements in Civil Engineering 2019, Conference proceedings, Subotica, Srbija, 2019, pp 323-332, ISBN: 978-86-80297-78-1

• **Kostadinović Vranešević K.**, Glumac A., Winkelmann U.: *Pressure field analyses of a low-rise building model surrounded by neighbouring buildings in urban areas*, 7th International Congress of Serbian Society of Mechanics, Proc. on CD, Sremski Kralovci, Serbia, 2019, pp 1-8

• Lazić Ž., **Kostadinović K.**, Koneski Z., Stanojević J.: *Ultimate Load of Rectangular Plate*, International Conference: Contemporary Achievements in Civil Engineering 2015, Conference proceedings, Subotica, Serbia, 2015, pp 309-315, DOI: 10.14415/konferencijaGFS 2015.039

• Šakrić A., **Kostadinović K.**, Šumarac D.: *Numerical Investigations of the Flow Around a High-rise Building*, 5th International Congress of Serbian Society of Mechanics, Proc. on CD, Aranđelovac, Serbia, 2015, pp 1-6, ISBN: 978-86-7892-715-7

• Šarkić A., Hemida H., Kostadinović K., Höffer R.: *Experimental Investigation of Interference Effect of High-rise Buildings for Wind Energy Extraction*, WINERCOST Workshop "Trends and Challenges for Wind Energy Harvesting", Proc. on CD, Coimbra, Portugal, 2015, pp 57-66
- M63** • **Kostadinović Vranešević K.**, Gluhović N., Dobrić J., Spremić M.: *Carbon steel vs. stainless steel behaviour of thin-walled cylindrical shells*, 15. kongres DGKS, Proc. on CD, Zlatibor, Srbija, 2019, pp 519-528, ISBN: 978-86-6022-069-3

• Koneski Z., **Kostadinović K.**, Kovačević S., Lazić Ž.: *The Effect of Transverse Shear Deformation on the Bending of Rectangular Plates*, 14. Congress DGKS, Zbornik radova, Novi Sad, Serbia, 2014, pp 205-214, ISBN: 978-86-85073-19-9

SCIENTIFIC WORKSHOPS

- 1st Training School on "Advances in Wind Energy Technology", WINERCOST, Malta, 26-31 May 2015 (awarded with full grant)

RESEARCH INTERESTS

- Wind engineering, CFD, wind energy, wind loading