



Pooja Rani

Curriculum Vitae

Objective

My main **research goal** is to conduct research, involving both industrial and academic collaborations, to support developers in various software engineering tasks such as program comprehension and maintenance tasks. My **research interests** are in the domain of Software Engineering (SE), human aspects of SE, empirical software engineering, mining repositories, data science, applied natural language processing (NLP) and machine learning (ML) to SE, and software documentation and evolution (with particular focus on IDE improvements).

Education

- 2018 – now **Ph.D in Software Engineering**, supervised by Oscar Nierstrasz and Sebastiano Panichella, University of Bern, Switzerland.
- 2015 – 2017 **Masters of Engineering in Software System**, Birla Institute of Technology and Science-Pilani, Rajasthan, India, CGPA – 8.53.
- 2011 – 2014 **Bachelor of Engineering in Computer Science**, The Institution of Engineers, India, CGPA – 8.33.
- 2008 – 2011 **Diploma in Computer Science and Engineering**, Kalpana Chawla Government Polytechnic for Women, Ambala, Haryana, India, Percentage – 83.

Work Experience

- July, 2017 – **Software Developer**, at People Interactive Group pvt ltd. Mumbai, India.
Dec, 2017 Changing underlying architecture and migrating code to node js framework
- Jan, 2017 – **Member of Technical Staff**, at VMware Software India pvt ltd. Bangalore, India.
Jun, 2017 Developing a framework for automating identity access management flow
- Jul, 2011 – **Software Tester**, at Samsung Research Institute, Noida, India.
July, 2014 Creating test plan, resource planning, review meetings for mobile testing

Teaching Activities

- 2018 – 2021 **Course Instructor, University of Bern, Bachelor & Master courses.**
- *Object-Oriented Programming*: Bsc course, every Spring 2018, 2019, 2020, and 2021.
 - *Software Modeling Analysis*: Msc course, Autumn 2018, and 2020.
- 2015 – 2016 **Teaching Assistant, BITS Pilani, Bachelor courses.**
- *Computer Architecture*: BE course, explaining verilog concepts, designing lab experiments.
 - *Computer Programming*: BE course, C language concepts, organizing exercises.
 - *Software Testing*: ME course, designing and correcting exercises

Supervision Activities

- 2019-2020 **Msc thesis, University of Bern.**
Supervised one master student and published the work in SANER, 2021
- 2018-2021 **Bsc thesis, University of Bern & University of Zurich.**
Supervised 5 bachelor students, currently writing two works
- 2018-2021 **Seminar projects, University of Bern.**
Supervised 3 seminar students on various topics

Publications

- JSS **How to Identify Class Comment Types? A Multi-language Approach for Class Comment Classification**, 2021.
- EMSE **What do class comments tell us? An investigation of comment evolution and practices in Pharo Smalltalk**, *To appear*, 2021.
- SCAM **What do Developers Discuss about Code Comments?**, *To appear*, 2021.
- SCAM **One article under review**, 2021.
- JSS **A Systematic Literature Review on Comment Quality**, *Submission under preparation*, 2021.
- ICSE **Speculative analysis for comment quality assessment**, 2021.
- SANER **Makar: A framework for multi-source studies based on unstructured data**, 2021.
- SATToSE **Software Analysis using Natural Language Queries**, 2018.

Collaborations

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|--------------------------------------|---------------------------------|
| ◦ Sebastiano Panichella, Switzerland | ◦ Mohammad Ghafari, New Zealand |
| ◦ Alexandre Bergel, Chile | ◦ Andrea Di Sorbo, Italy |
| ◦ Nataliia Stulova, Switzerland | ◦ Alessandra Gorla, Spain |

Other Professional activities

- 2019–Today Board Member of CHOOSE group (Swiss group for Software Engineering)
- 2018–2021 Co-reviewed papers of various international conferences and journals (SANER, TOSEM, ICSME)

Achievements and Awards

- 2018 Best presentation award at SATTOSE, 2018
- 2014 Qualified GATE 2015 - Research fellowship from MHRD(Ministry of Human Research Development), India.
- 2012 Received the youngest Employee of the year award in Samsung.
- 2011 Batch Topper – Secured 1st Rank in Diploma college.
- 2007 Silver Medal – Won Silver Medal in state level Taekwondo Championship, Haryana.

More Details

Nationality – Indian

Language – English (C1), Hindi (native), German (A2.1)

Home page – <https://poojaruhal.github.io/>

Office page – <http://scg.unibe.ch/staff/Pooja-Rani>

Google Scholar – <https://scholar.google.com/citations?user=2B8GcJ4AAAAJ>

References

Available on Request