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, Data Science (DS), Natural language processing (NLP) and Machine learning applied to SE, and Software maintenance 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 Goverment Polytechnic for Women, Ambala*, Haryana, India, *Percentage – 83*.

Work Experience

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

ICSE **Speculative analysis for comment quality assessment**, 2021.

SANER **Makar: A framework for multi-source studies based on unstructured data**, 2021.

SCAM **Two articles under review**, 2021.

JSS **A Systematic Literature Review on Comment Quality**, *Submission under preparation*, 2021.

SATToSE **Software Analysis using Natural Language Queries**, 2018.

Collaborations

- Sebastiano Panichella, Switzerland
- Mohammad Ghafari, New Zealand
- Alexandre Bergel, Chille
- 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)

✉ *pooja.rani@inf.unibe.ch*

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.

References

Available on Request

More Details

Date of Birth – 20-01-1993

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