

Carianne Pretorius

DOCTORAL CANDIDATE · INNOVATION, TECHNOLOGY, ENTREPRENEURSHIP AND MARKETING (ITEM) GROUP

Johannes van der Waalsweg 94, Eindhoven, 5612JD, Netherlands

✉ C.Pretorius@tue.nl 🌐 <https://cariannepretorius.github.io/> 📺 cariannepretorius/

Education

Doctoral Candidate, Industrial Engineering

Eindhoven, The Netherlands

EINDHOVEN UNIVERSITY OF TECHNOLOGY

Jan. 2017 - Present

- ITEM Group, Industrial Engineering and Innovation Sciences.
- Promoter: Prof.Dr Fred Langerak.
- Supervisors: Dr Maryam Razavian, Dr. Katrin Eling.
- Topic: Cognitive styles in software design decision making.
- Expected graduation date: Spring 2021

Master's Degree Socio-Informatics

Stellenbosch, South Africa

STELLENBOSCH UNIVERSITY

Jan. 2013 - Mar. 2016

- Full thesis Masters degree.
- Supervisor: Prof.Dr.Dr Bruce Watson.
- Topic: Procedural decision support systems for supporting wicked problems.
- Graduated *cum laude*.

Bachelor's Degree (Honours) Socio-Informatics

Stellenbosch, South Africa

STELLENBOSCH UNIVERSITY

Jan. 2012 - Dec. 2012

- Part coursework and part thesis honours degree.
- Coursework: Information systems theory, Systems analysis & design, Security, Algorithmics, Web programming, Data warehousing, Software development and testing, Enterprise resource planning, Leadership and decision making, and Knowledge management.
- Mini-thesis topic: A domain-specific language for producing web mashups.
- Graduated *cum laude*.

Bachelor's Degree Socio-Informatics

Stellenbosch, South Africa

STELLENBOSCH UNIVERSITY

Jan. 2009 - Dec. 2011

- Majors: Socio-Informatics and Psychology. Minor: Decision-Making and Value Studies.

Publications

1. Pretorius, C., Razavian, M., Eling, K., & Langerak, F. (2019). *Beyond Reason: Uniting Intuition and Rationality in Software Architecture Decision Making*. Paper presented at Annual Conference of the IEEE International Conference on Software Architecture (Companion): ICSA-C 2019, Hamburg, Germany. doi: <http://dx.doi.org/10.1109/ICSA-C.2019.00056>.
2. Pretorius, C., Razavian, M., Eling, K., & Langerak, F. (2018). *Towards a Dual Processing Perspective of Software Architecture Decision Making*. Paper presented at Annual Conference of the IEEE International Conference on Software Architecture (Companion): ICSA-C 2018, Seattle, WA, USA. doi: <http://dx.doi.org/10.1109/ICSA-C.2018.00021>.
3. Pretorius, C. (2017). Exploring Procedural Decision Support Systems for Wicked Problem Resolution. *South African Computer Journal*, 29(1), 191-219. Retrieved from: <http://dx.doi.org/10.18489/sacj.v29i1.448>.
4. Pretorius, C. (2016). *Supporting Wicked Problems with Procedural Decision Support Systems*. Paper presented at Annual Conference of the South African Institute of Computer Scientists and Information Technologists: SAICSIT '16, Johannesburg, South Africa. doi: <http://dx.doi.org/10.1145/2987491.2987515>.
5. Pretorius, C. (2016). *Towards a Procedural Decision Support System for Wicked Problems* (Master's Thesis, Stellenbosch University, Stellenbosch, South Africa). Retrieved from: <http://hdl.handle.net/10019.1/98530>.
6. Parry, D. & Cowley, C*. (2015). *Maps as a Technique for Visualizing Load-Shedding Schedules*. Paper presented at Annual Conference of the South African Institute of Computer Scientists and Information Technologists: SAICSIT '15, Stellenbosch, South Africa. doi: <http://dx.doi.org/10.1145/2815782.2815784>.
7. Barnett, R.J. & Cowley, C.* (2012). *A Ruby Domain Specific Language for Web Mashups*. Paper presented at IADIS International Conference on WWW/Internet: Madrid, Spain. Retrieved from: <http://hdl.handle.net/10019.1/84536>.

*Maiden name

Research Interests

Human aspects of software engineering, Decision making and decision support, Software design.

Experience

Doctoral Candidate & Researcher

Eindhoven, The Netherlands

EINDHOVEN UNIVERSITY OF TECHNOLOGY

Jan. 2017 - Present

- Research output: 2 conference papers published, 1 magazine/journal article under review, 1 journal article in preparation.
- (Co)supervision of bachelor end projects: 5 completed.
- Teaching subjects: Business aspects of intelligent lighting, Technology entrepreneurship.

Junior Lecturer

Stellenbosch, South Africa

STELLENBOSCH UNIVERSITY

Jan. 2013 - Dec. 2016

- Research output: 1 journal article, 2 conference papers (1 as first author).
- Coordination, management, and teaching of a number of Socio-Informatics courses (usually as responsible lecturer).
- Teaching subjects: Web design and programming, Database systems, Information systems in organisations.
- Supervision of honours research projects: 5 completed.
- Was part of the faculty first year committee that came up with strategies to assist vulnerable first year students.
- Acted as a member of the department assessment panel for Master's theses.

Lecturer's Assistant and Tutor

Stellenbosch, South Africa

STELLENBOSCH UNIVERSITY

Feb. 2011 - Nov. 2012

- Facilitated and oversaw practical sessions for second and third year Socio-Informatics modules.
- Became head tutor in the second year due to proven tutoring and administrative skills.
- Assisted lecturers with assessment sessions and grading.

Extracurricular Activity

Volunteer

Eindhoven, The Netherlands

PARKRUN

Sep. 2019 - Present

- Part of the core volunteer team that launched parkrun Netherlands, at Karpendonkse Plas parkrun, Eindhoven on 29 February 2020.
- Running and facilitating weekly parkrun events (route marshalling and barcode scanning) pre-COVID-19.

Skills

Languages English (native proficiency), Afrikaans (professional working proficiency), Dutch (limited working proficiency)

Academic Quantitative research (experiments), Data analysis, Teaching, Supervision.

Software MS Office, Qualtrics, SPSS, LaTeX, R (basic).

Development Python, MySQL, UML.

Web HTML5, CSS3, JavaScript.

Honours & Awards

2018 **Magic WARP Award**, Best PhD research proposal at "Writing and Assessing Research Proposals" course at Department of Industrial Engineering.

2013 **Scholarship**, Harry Crossley Foundation Scholarship for master's study.

2012 **Bursary**, Stellenbosch University Merit Bursary for honours study.

2012 **Bursary**, National Research Foundation Scarce Skills Bursary for honours study.

2011 **Bursary**, Stellenbosch University Merit Bursary for undergraduate study.

Hobbies

Running, hiking, bouldering, gardening, travelling, wine and beer tasting, fine dining and cooking.