Julian Frattini

DOCTORAL STUDENT IN SOFTWARE ENGINEERING

Polhemsgatan 27C LGH 1002, 37140 Karlskrona, Sweden

📞 +46 70 1492913 | ✉ julian.frattini@bth.se | *15th of March, 1995

Education

Hallertau Gymnasium Wolnzach
Hallertau, Germany

GYMNASIUM
2005-2013

- **Cork International Language Academy**, Cork, Irland — *language study travel 2010*
- **Higher Education Entrance Qualification** with grade 1.0 — *2013*

Technical University of Munich
Munich, Germany

BACHELOR OF SCIENCE IN INFORMATICS, GAMES ENGINEERING
2013-2016

- **Bachelor's Thesis**, "Analysis and Classification of Melee Combat Systems" (online view) — *Summer Term 2016*
- **Bachelor's Degree** with grade 1.9

Technical University of Munich
Munich, Germany

MASTER OF SCIENCE IN INFORMATICS
2016-2019

- **Seminar's Thesis**, "Automated Glossary Extraction" (online view) — *Summer Term 2018*
- **Master's Thesis**, "Interactive Learning of Cause-Effect-Patterns" (online view) — *Summer Term 2019*
- **Master's Degree** with grade 1.5

Blekinge Tekniska Högskola
Karlskrona, Sweden

PH.D. IN SOFTWARE ENGINEERING
2020-2025

- Applying the principle of **Requirements Debt** to explore the notion of **Good-Enough Requirements Engineering**
- Natural Language Processing tasks for **Automatic Detection and Extraction of Causal Relations** from Requirements
- Pedagogical projects investigating **Curriculum Coherence in Software Engineering Education**

Skills

Knowledge of Language	German (mother's tongue), English (fluent, C1), Swedish (basic, A2), Arabic (basic, A2), French (basic, A1)
Programming Languages	Java, Python, C, C#, OCaml, JavaScript, PowerShell
Databases	SQL, MongoDB
Web development	HTML, CSS, Node.js, Express, Angular
Version Control Software	Git, Jira, Confluence

Experience

Circles and Lines
Munich, Germany

INTERNSHIP IN ANIMATION
2013

- Animation and 3D-modelling
- Development of a driving simulation for major automobile manufacturers

Bayerische Staatskanzlei
Munich, Germany

WORKING STUDENT IN IT-SUPPORT
2014-2017

- First- and Second-Level-Support for daily business
- Maintenance of the technical infrastructure

Dynamic Software AG
Munich, Germany

WORKING STUDENT IN SOFTWARE DEVELOPMENT
2017-2019

- Various projects as a software engineer and requirements engineer
- Planning, developing and presenting software projects both independently and as a team

Research Projects

Understanding Requirements Debt
SERT Initiative

Leading Researcher
2020-recent

- Interview study towards the perception of requirements debt by practitioners
- Large-scale online survey on the application of the concept of requirements debt in practice

Causality in Requirements Artifacts (CiRA)
SERT Initiative

Supporting Researcher
2020-recent

- Syntax-based causality extractor including proof-of-concept validation
- Case study on the occurrence of causality in natural language requirements artifacts and binary classifier for causal sentences, winning the Best Paper Award at the 27th International Working Conference on Requirement Engineering: Foundation for Software Quality (REFSQ21)
- Large-scale online survey on the perception of causal sentences regarding the dimensions of conditional clauses

Industrial Projects

Static code analysis tool substitution
Dynamic Software AG for Knorr Bremse AG

Requirements Engineer
2019

- Examination of the scope of an alternative static code analysis tool SonarQube
- Compliance to the Knorr Bremse development environment currently utilizing PC-Lint
- **Utilized technology**: JIRA, static code analysis in C, SonarQube, PC-Lint, PC-Lint Plus

Support of VDA4987 integration
Dynamic Software AG for Samvardhana Motherson Peguform

Software Engineer, Requirements Engineer
2018

- Integration of new UN/EDIFACT standard for electronic data interchange at SMP
- Development of a parsing tool from Dynamic Software's MultiParser configurations into human-readable guidelines
- Development and adaption of VDA standards through exchange with SMP
- **Utilized technology**: Java, Apache POI, EDIFACT DESADV

Windows Slave Manager
Dynamic Software AG for Knorr Bremse AG

Software Engineer
2018

- Development of a WinSlaveManager tool utilized in continuous integration
- Automatizing evaluation of necessity for DSM updates on slave machines from a centralized Jenkins job
- **Utilized technology**: Java, Jenkins, Jenkins library for a Java Interface, PowerShell

CRC Plugin
Dynamic Software AG for Knorr Bremse AG

Software Engineer
2017

- Jenkins plugin displaying cyclic redundancy checksums over project boards and visualizing possible changes
- **Utilized technology**: Java, Jenkins, Jenkins library for a Java Interface, YAML, Apache Jelly