

## Summary

- I am a researcher, instructor and software engineer with extensive experience both in the industry and the academy. My academic specialization is in higher-order unification and theorem proving with research done also in proof certification and formal verification. I have experience in teaching of university level courses and have held a management position as a lead developer in a successful technology company.
- **Research Topics:** Automated Deduction, Proof Transformation, Legal Informatics and Formal Verification
- **Teaching:** Computer and Data Sciences

## Experience

- **The American University of Paris** Paris, France  
*Assistant Professor for Computer Science* from Sep. 2017
  - Lecturer during the academic year 2016-2017
  - Teaching courses on data mining, web development, software engineering, programming and other topics
  - Current research on proof assistants and legal informatics
- **Prosecco Team - Microsoft Research - Inria Joint Center** Paris, France  
*Research Engineer* Jan. 2017 – Jul. 2017
  - Research on type checkers
  - Ocaml and F\* developer in the F\* project
- **Parsifal Team - École Polytechnique/Inria** Palaiseau, France  
*Researcher* Jan. 2015 – Dec. 2016
  - Research on proof certification and unification on ERC advanced grant ProofCert
  - λProlog, Prolog, Ocaml and Scala developer in the Checkers and Leo-III teams
  - Reference: Dale Miller, head of the group
- **École Polytechnique** Palaiseau, France  
*Teaching Assistant* Mar. 2015 – Aug. 2016
  - Principles of Programming Languages (INF321) Undergraduate course, Spring 2015, 2016
  - Computational Logic (INF551) Master course, Fall 2015
  - Supervision of student projects and interns
- **Microsoft Research - Inria Joint Center** Palaiseau, France  
*Researcher* Oct. 2012 – Dec. 2014
  - Research on theorem provers and proof assistants for the TLA+ proof language
  - Modeling and verifying real time systems using the TLA Proof Assistant and Model Checker
  - Ocaml and Java developer in the TLA+ Proof System project
  - Reference: Leslie Lamport, head of the group
- **Theory and Logic Group - Vienna University of Technology** Vienna, Austria  
*Project Assistant* Nov. 2008 – Sep. 2012
  - Researching algorithms for higher-order unification and resolution
  - C, C++ and Scala developer in the Generic Architecture for Proofs project
  - Reference: Alexander Leitsch, head of the group
- **Quigo Technologies** Tel Aviv, Israel and New York, USA  
*Programming Team Lead* Sep 2001 – Jan 2006
  - In charge of a Big Data team developing search marketing solutions
  - In charge of all the company database integration development, HTTP server side development, software deployment and continuous integration
  - The company was merged<sup>1</sup> into AOL
- **Various Companies** Jerusalem, Israel  
*Java Programmer* 1998 - 2001
  - Surfnotes and VerticalNet Solutions
  - Was employed as an OOP consultant to a formal text book used by computer students in Israel

<sup>1</sup><http://techcrunch.com/2007/11/07/aol-buys-quigo-confirmed/>

## Education

- **Vienna University of Technology** Vienna, Austria  
*Ph.D. in Computer Sciences* *2008 – 2012*
  - Ph.D. Thesis - Unification in Higher-order Resolution
- **Vienna University of Technology** Vienna, Austria  
*M.Sc in Computer Sciences* *2006 – 2008*
  - Master Thesis: Cut Elimination in Inductive Proofs of Weakly Quantified Theorems
- **The Hebrew University** Jerusalem, Israel  
*B.Sc in Computer Sciences* *1998 – 2001*

## Academic Activities and Awards

- Visiting researcher in Van der Torre's group in the university of Luxembourg
- Was awarded the Erasmus Mundus scholarship for the European MSc programme Computational Logic for the academic years 2006-2007 and 2007-2008
- Invited lecture in the EMCL student workshop in Vienna, 2016
- Reviewer for several journals and conferences
- Collaboration with and visits to Christoph Benzmüller's research group, FU Berlin

## Publications

- Please refer to my home page