

HANNELI TAVANTE

 github.com/hannelita  hannelita.com  hannelita@gmail.com


EDUCATION

McGill University <i>Graduate Student (MSc) - Computer Science</i>	<i>Montréal, QC, Canada</i> <i>2020-2022(expected)</i>
Universidade Federal de Itajubá <i>Master's Degree - Electrical Engineering</i> <i>Bachelor's Degree - Computer Engineering</i>	<i>Itajubá, MG, Brazil</i> <i>2018 - 2019</i> <i>2007 - 2011</i>

SELECTED RESEARCH, TEACHING AND WORK EXPERIENCE

McGill University - <i>Integrated Microsystems Laboratory</i> Contributions: start a new research project focusing on formal verification of circuits using the Coq proof assistant. Discuss other existing strategies for formal verification of circuits (i.e. SMT solvers); compare existing HLS solutions; integrate results with ongoing Assertion Based Verification projects.	<i>June 2021 - present</i>
Universidade Federal de Itajubá - <i>aPTIs-SG2 - Smart Grids Laboratory</i> Implement reliable solutions for electromagnetic transient analysis algorithms.	<i>Feb 2018 - Dec 2019</i>
Independent Senior Consultant <i>Short-term contracts for multiple worldwide startups</i> - Build APIs, Big Data, NoSQL, Data Science, Data Engineering, devops. - Functional Programming and Machine Learning projects.	<i>Aug 2017 - present</i>
Senior Developer and Team Leader at Codeminer42 - Manage and organise worldwide teams, helping them with technical issues. Project areas: data analysis, data engineering, integration, database connectors, management of frameworks and libraries, implementation of performance tests, devops.	<i>June 2014 - Apr 2017</i>
Middleware Consultant at Red Hat - Customer relations, propose middleware Java solutions. Propose and manage workshops about Red Hat products for customers and co-workers.	<i>Oct 2013 - May 2014</i>
Top Free Games <i>Developer</i> - Build cloud solutions with Heroku and Amazon AWS to increase backend systems performance. Monitor systems availability and performance, create auto-scalable systems, collect and analyze real time data with Cassandra, Kafka and Hadoop. Develop native apps for iOS.	<i>Nov 2012 - Oct 2013</i>

VOLUNTEERING, LEADERSHIP AND OPEN SOURCE

Industry Contributions - Open Source Software contributor to Ruby, Java, JBoss, Red Hat projects, Neo4j, Cassandra. - Speaker in worldwide conferences (Brazil, USA, Europe, Argentina and Canada)  - Cassandra MVP 2015, 2016.
--

SKILLS

- Languages: Portuguese (Native), English (C1), French (B2), German (A1), Spanish (A1)
- Public speaking, team management

TECHNICAL HIGHLIGHTS

- Fluent: Haskell, OCaml, Python, Ruby, Java
- Skilled: Rust, C, C++, Assembly, Javascript, Typescript, Verilog
- Domains and background: Backend development, API design, devops, FPGAs, fault-tolerant systems, formal methods, theorem proving.