


Gabriel Ferreira

Software Engineer,
Researcher

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 LinkedIn

 GitHub Profile

Languages

 Portuguese ● ● ● ● ●

 English ● ● ● ● ●

Hard Skills

JavaScript/Node.js

Ruby/Rails

Software Variability

Software Security

Program Analysis

Data Analytics

Soft Skills

Critical Thinking

“Evidence to support arguments.”

Creative Problem Solving

“Let’s talk about the solution space!”

Team Work

“Are you blocked? I can help!”

Time Management

“First things first, the rest can wait!”

Hands-on Mentoring

“Let’s think about/do this together!”

Engaging Presentations

“Story, enough text, and consistency.”

Clear&Precise Writing

“Simple is best.”

Education

PhD. in Software Engineering [Aug 2014 — Current]

Carnegie Mellon University

Thesis: *Towards Practical and Trustworthy Package Management*

MS. in Computer Science [Mar 2010 — Aug 2012]

Federal University of Uberlandia

Dissert.: *On the Use of Feature-Oriented Programming for Evolving Software Product Lines*

BS. in Computer Science [Feb 2005 — Nov 2009]

Federal University of Uberlandia

Industry Experience

Software Engineer [Aug 2021 — Current]

AdQuick

Project: Analytics Pipeline (Goal: provide attribution insights for ad campaigns)

Tech: Ruby/Rails, Kotlin, PostgreSQL, GCP, AWS, Docker, Kubernetes

Software Engineer [May 2021 — Aug 2021]

HP Inc.

Project: Workstation Resources Manager (Goal: efficient computational resources sharing)

Tech: C#, JavaScript, React.js, SQLite, Jenkins

Software Engineer [Aug 2012 — Aug 2014]

Federal University of Uberlandia

Project: Education platform (Goal: code duplication reduction in web systems).

Tech: Java, JavaScript, IBM DB2, REST

Software Engineer [Aug 2011 — Aug 2012]

Zup IT Innovation

Project: Sales platform (Goal: provide lightweight tool for sales reps.)

Tech: Java, jQuery, JavaScript, OracleDB, REST

Software Engineer [Aug 2008 — Mar 2010]

Technology and Quality on Information

Project: VoIP platform (Goal: provide cheaper phone solutions to enterprises)

Tech: Java, JBoss, Asterisk*, OpenSIPS

Teaching/Mentoring Experience

Research Mentor [Summer 2021]

Summer STEM Institute - MIT

Mentee(s): two

Research Mentor [Summer 2016, 2018, 2019]

REUSE - Carnegie Mellon University

Mentee(s): Htut Khine, Kalil Garret, Sidney Covitz

Teaching Assistant [Fall 2015, 2016]

Carnegie Mellon University

Subject(s): Software Engineering, Innov. Ecosystems, Influence and Persuasion Online.

Temporary Lecturer [Feb 2012 — Apr 2013]

Federal University of Uberlandia

Subject(s): Intro to Programming, Software Modeling, Information Retrieval, Database Systems, Logic Programming.

Selected Publications

Ferreira, G., Jia, L., Kästner, C., Sunshine, J. **Containing Malicious Package Updates in npm with a Lightweight Permission System.** Proc. of ICSE (2021).

Garrett, K., Ferreira, G., Jia, L., Kästner, C., Sunshine, J. **Detecting Suspicious Package Updates.** Proc. of ICSE-NIER (2019). Ferreira, G., Malik, M., Kästner, C., Pfeffer, J., Apel, S.

Do #ifdefs Cause Vulnerabilities? An Empirical Study of the Linux Kernel. Proc. of SPLC: 65-73 (2016). [Distinguished Paper].

For a complete list, see the <full CV>