Eduardo Faccin Vernier

I'm a PhD candidate studying visualization methods for hierarchical and high-dimensional data that change over time. I focused on dynamic treemaps and dynamic projection techniques, creating comprehensive evaluations and developing state-of-the-art methods.

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EDUCATION

Joint PhD in Computer Science — Universidade Federal do Rio Grande do Sul (UFRGS) and University of Groningen (RuG)

August 2017 - September 2021

- Thesis: "Visualization of Dynamic Multidimensional and Hierarchical Datasets"
- Course organization and teaching experience
- Published and presented at high profile conferences and journals
- Collaborated with a large number of researchers and scientists

Master in Computer Science — Universidade Federal do Rio Grande do Sul March 2017 - August 2017 (didn't finish, upgraded to PhD program after 6 months)

Branetec Exchange Program — University of Groningen August 2015 - July 2016

Computer Science BSc — Universidade Federal do Rio Grande do Sul March 2012 - December 2016

PEER-REVIEWED ARTICLES

(see personal website for pdfs, presentations, and extra material)

Quantitative Evaluation of Time-Dependent Multidimensional **Projection Techniques** Proc. EuroVis, Norrköping, Sweden (CGF) – 2020

Quantitative Comparison of Time-Dependent Treemaps Proc. EuroVis, Norrköping, Sweden (CGF) -2020

Selecting and Sharing Multidimensional Projection Algorithms: A Practical View Proc. VISGAP, Norrköping, Sweden - 2020

A Stable Greedy Insertion Treemap Algorithm for Software **Evolution Visualization** Proc. SIBGRAPI, Foz do Iguaçu, Brazil - 2018

Distinguished paper award

Quantitative Comparison of Dynamic Treemaps for Software Evolution Visualization Proc. VISSOFT, Madrid, Spain - 2018

Best poster award.

Quantitative Comparison of Treemap Techniques for Time-Dependent Hierarchies Proc. EuroVis, Barcelona, Spain - 2017

Metric Evolution Maps: Multidimensional Attribute-driven Exploration of Software Repositories Proc. VMV, Bayreuth, Germany - 2016

PROFESSIONAL EXPERIENCE

Isobar IWS Brazil — Intern, Android Developer

September 2016 - February 2017

Development of prototype applications for Android.

SAP Labs Latin America — Intern, Web Developer

January 2014 - March 2014

Development of a web prototype for the management of Randon's Vehicle Testing Facilities using the SAPUI5 framework.

LANGUAGES Portuguese - Native **Spanish** - Intermediate

English - Fluent

Dutch - Intermediate

ACADEMIC PROJECTS

NEMO (RuG/UMCG/Ziuz)

September 2020 -:

Collaboration in a large scale project with teams of medical and machine learning experts to develop classifiers and gain insight into hyperkinetic movement disorders.

Scientific Visualization and **Computer Graphics Group (***RuG***)**

November 2015 - July 2016 and June 2017 - July 2017

Development of temporal and high dimensional data visualization techniques applied understanding software quality metrics evolution in open source projects.

Laboratório de Modelagem de **Bacias** (UFRGS)

May 2014 - December 2014

Development of methodologies and tools for the forecast and response to natural catastrophes in collaboration with IEEE SIGHT and Civil Defence RS. Focus on image processing and high definition large area mosaicing of aerial photography.

PET Computação Group (UFRGS)

October 2012 - January 2014

Instructor on multiple editions of Arduino and C Language courses; Collaborator on the development of small scale robotics projects.

OTHER PROJECTS

TC de Uithof - Technical committee Development of tennis training

enrolment and control systems. Built telegram bots hosted at AWS that notifies members of freed training spots in real-time with 100+ subscribers.

Bike de Boa - Mobile Developer Open source project that maps the bike parking infrastructure in Brazil with 200k+ visits. bikedeboa.com.br