Eduardo Faccin Vernier

I hold a joint PhD degree from the universities of Groningen and Rio Grande do Sul for my research on visualization methods for hierarchical and high-dimensional data. I focused on dynamic treemaps and dynamic projection techniques, creating comprehensive evaluations, developing state-of-the-art methods, and applying these in the context of hyperkinetic movement disorders. Since October 2021, I have been working as a data scientist at MLPrograms in Amsterdam, creating ML models and analytics tools for the auto insurance market.

+31 651731257
Utrecht, Netherlands
efvernier@gmail.com
eduardovernier.github.io
Google Scholar

PROFESSIONAL EXPERIENCE

Machine Learning Programs — Data Scientist — Amsterdam

October 2021 - (current) - mlprograms.com

Design, implementation, and production of machine learning models and analytics tools for the insurance UK insurance market, mostly focusing on pricing and risk prediction.

Isobar IWS Brazil — Intern Android Developer — Porto Alegre

September 2016 - February 2017 - isobar.com

Development of prototype applications for Android (Java).

SAP — Intern Web Developer — São Leopoldo

January 2014 - March 2014 - sap.com

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

EDUCATION

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

August 2017 - October 2021

— Thesis: "Visualization of Dynamic Multidimensional and Hierarchical Datasets"
— Course organization and teaching experience
— Published and presented at high-profile conferences and journals

Master in Computer Science — Universidade Federal do Rio Grande do Sul

March 2017 - August 2017 (didn't finish, promoted to PhD program after 6 months)

Branetec Exchange Program — University of Groningen

August 2015 - July 2016

Bachelor Degree in Computer Science— Universidade Federal do Rio Grande do Sul

March 2012 - December 2016

PEER-REVIEWED ARTICLES (80+ citations, all PDFs and extras available here)

Guided Stable Dynamic Projections Proc. EuroVis, Zurich, Switzerland (Computer Graphics Forum) - 2021

Quantitative Evaluation of Time-Dependent Multidimensional Projection Techniques Proc. EuroVis, Norrköping, Sweden (Computer Graphics Forum) - 2020

Quantitative Comparison of Time-Dependent Treemaps Proc. EuroVis, Norrköping, Sweden (Computer Graphics Forum) - 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

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

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

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

LANGUAGES

Portuguese - Native   **English** - Fluent
Spanish - Intermediate   **Dutch** - Basic

ACADEMIC PROJECTS

NEMO Project (RuG/UMCG/Ziuz)

September 2020 - October 2021

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 to understanding software quality metrics evolution in open source projects.

Basin Modeling Lab (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 in C++ 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 (extras info here)

TC de Uithof - *Technical committee*

2020 - 2021 - Development of tennis training enrolment and control systems.

Built telegram bots hosted at AWS that notify members of freed training spots in real-time with 300+ subscriptions. Wrote scripts to manage training and court allocation.

Bike de Boa - *Mobile Developer*

2017 - 2019 - Open source project that maps the bike parking infrastructure in Brazil with 200k+ visits. bikedeboa.com.br