Yuri Rossi Tonin | Curriculum Vitae

Rua Luiz Dionísio de Souza, 375 apt 271, Campinas, SP, Brazil, 13098-426

+55 19 99179-3129 • yrtonin@gmail.com

Professional Experience

- **Optical Engineer - Brazilian Synchrotron Light National Laboratory** — **Campinas, Brazil**
  Data processing in Python, optical metrology, CAD, control and automation, documentation — *2019-Present*
- **R&D Internship at Brainlab AG - *Medical Hardware and Software company.*** — **Munich, Germany**
  Hardware testing and assembly, technical documentation, overall support — *Mar 2018–Dec 2018*

Education

- **Campinas State University (UNICAMP)** — **Campinas, Brazil**
  Masters in Applied Physics — *2020–Present*
  Dissertation: Image processing and reconstruction for Coherent Diffraction Imaging. **Current GPA: 4.0/4.0**
- **University of North Carolina at Chapel Hill** — **Chapel Hill, USA**
  Study abroad program in Physics , Dean's list Fall 2015 and Spring 2016 , ***GPA: 3.796/4.00*** — *2015–2016*
- **Federal University of São Carlos (UFSCar)** — **São Carlos, Brazil**
  Bachelor's in Engineering Physics , ***GPA: 8.25/10.0*** — *2012–2018*

Notable Projects

- **Undergraduate Thesis at University of São Paulo (USP), Brazil:** *Development and implementation of a Magnetic Resonance Imaging processing method for evaluation of cirrhosis and liver function. Evaluated with maximum grade.*
- **Research at Illinois Institute of Technology, USA:** *Simulation of an interferometer for measuring antimatter gravity*
- **Research at University of North Carolina at Chapel Hill, USA:** *Construction and simulation of a gamma-ray pair spectrometer for meteorite studies*
- **Research at University of São Paulo, Brazil:** *1st Project: Development of high-resolution imaging system for cold atoms experiment. 2nd Project: Development of high-efficiency frequency doubling cavity to generate 421nm laser light*
- **Member of Startup team.** *Winner Startup competition "Your Idea in Practice - São Carlos edition"*
  Being private lessons a highly demanded, informal and not well explored market in Brazil, we proposed to organize the offer of private teachers, support them, and create an online platform to help students outside of lessons.

Publications

- **Surface metrology of cylindrical mirrors with sagittal curvature in low spatial frequency range (Link)**
  Published in Proc. SPIE 11492, Advances in Metrology for X-Ray and EUV Optics IX, 1149209, 2020.
- **A Low-Background Coincidence Spectrometer for Radioisotope Studies (Link)**
  Published in Nuclear Instruments and Methods in Physics Research A, v. 871, p. 66-71, 2017
- **Investigation of the Momentum Distribution of an Excited BEC by Free Expansion (Link)**
  Published in Journal of Low Temperature Physics, v. 180, p. 126-132, 2015
- **Nonlinear Dependence Observed in Quadrupolar Collective Excitation of a Trapped BEC (Link)**
  Published in Journal of Low Temperature Physics, v. 180, p. 144-152, 2015

Scholarships and Certificates

- Fully funded scholarship from Brazil Scientific Mobility Program for a 1 year-long study abroad program
- Certificate in Advanced English (CAE) from University of Cambridge

Technical and Personal skills

- **Programming and Software skills:** Python, Labview, AutoDesk Inventor, git, EPICS. Shorter experience with: C, C++, Mathematica, Matlab, Fortran, Geant4
- **Languages:** Fluent English, Advanced German, Basic Italian, Native Portuguese
- **Interests:** Reading | Cooking | Guitar | Economics | Science Communication