Ian Germoglio Barbosa

Civil Engineer with interest in Railroads, Transportation Engineering, Urban Mobility, Urban Planning, and Road Infrastructure.

217 693 9522
iangermoglio@gmail.com
1601 E Florida Ave - 61802
Urbana, Illinois, US

Education

University of Illinois at Urbana Champaign - Master of Science in Civil Engineering

GPA : 3.57/4.00 May 2020 – May 2022

Universidade Federal da Paraíba - Bachelor of Science in Civil Engineering

GPA : 7.98/10.0 Oct 2013 – Oct 2019

Institut National des Sciences Appliquées - Specialization in Infrastructure, Bridges and Viaducts

GPA : 14.33/20.0 Aug 2017 – Dec 2018

Professional Experience

ENSCO Rail – Product Manager – Illinois, USA (Remote)   June 2022 –Present
Product manager of Virtual Track Walk, a railroad infrastructure inspection system that uses machine vision to improve maintenance and support capital planning decisions. I lead/support software developers to refine our products based on market's needs, while managing relationship with current and potential new clients. 400K USD annual budget.

RailTEC UIUC – Graduate Research Assistant – Illinois, USA   May 2020 – May 2022
Using intense data analysis methods, developed a component track health component index based on business rules from different railroad companies and research findings, using data extracted from real track, applying 3D laser scanning technology, and deep convolutional neural networks for embedded Class I railroads safety inspections.

Techint Construction & Engineering – Field Engineer – Maranhão, BR   Jan 2020 – May 2020
Field engineer responsible for mechanical assembly of 4 Diverter Dumpers in a gas power plant in Maranhão – Brazil. Worked directly with the technical assistant from Siemens and managed a team with 50+ workers. 500M USD project.

GCC Groupe – Intern – Lyon, FR   Jul 2018 - Nov 2018
Supervised the work of approximately 40 employees in the construction of a 6000 m^2 hospital in the metropolitan area of Lyon. I developed a work with people from more than 5 different nationalities. 20M USD project.

Railroad Related Courses

- **Railroad Track Engineering:** Design, construction, and maintenance of railroad track and its components. Strong MicroStation, AutoCAD, and Civil 3D background.
- **Railway Terminal Design and Operations:** Design of classification yards, intermodal facilities and bulk terminals.
- **Advanced Track Engineering:** Track design and practical application of track engineering principles and technology advances in track evaluation, modeling, and maintenance.
- **Railroad Project Design and Construction:** Economic analysis, planning, design, construction, and operation of a railroad project.
- **Railroad Transportation Engineering:** Quantitative analysis of train resistance, power and energy requirements, effects of aerodynamics, grade, and curvature, and their effect on speed, power, and acceleration. Railroad track system design, components, roadbeds, and maintenance needed to support safe and efficient movement of railway vehicles

Advanced Software Skills

- MicroStation
- AutoCAD
- Civil3D
- MySQL
- Microsoft Office – Word, PowerPoint, Excel
- Python
- Machine Learning

Associations

- AREMA Student Chapter at UIUC Vice President between 2021-2022

- Member of AREMA Committee 2 – Track Measurement and Assessment Systems since 2021