

Pedro Maciel Xavier

BSc '23 ♦ BSc '23



///// EDUCATION

Purdue University, West Lafayette, IN

aug '25 ► *present* Ph.D. Electrical & Computer Engineering*
FIRST YEAR with Vassilis Kekatos

aug '24 ► *jul '25* Ph.D. Chemical Engineering
TRANSFERRED with David E. Bernal Neira

Federal University of Rio de Janeiro, Brazil

jul '22 ► *present* M.Sc. Computer Science & Systems Engineering*
GPA .96 ⓘ with Nelson Maculan & David E. Bernal Neira

apr '16 ► *apr '23* B.Sc. Computer & Information Engineering
GPA .79 ⓘ with Priscila Machado Vieira Lima

feb '18 ► *apr '23* B.Sc. Mathematics
DOUBLE MAJOR

///// EXPERIENCE

Microsoft Research, Cambridge, UK

Julia Git Mathematical Programming Analog Optimization Open-Source

apr '24 ► *jul '24* Research Intern
FULL-TIME with Christos Gkantsidis & Kirill Kalinin

PSR Energy Consulting & Analytics, Rio de Janeiro, Brazil

Julia Python GIS Git Operations Research Power Systems Analysis
Stochastic Optimization Innovation Quantum Optimization Open-Source

mar '23 ► *mar '24* Research & Development Analyst
FULL-TIME with Joaquim Dias Garcia & Guilherme Bodin

nov '21 ► *feb '23* Research & Development Intern
PART-TIME with Joaquim Dias Garcia

Purdue University, West Lafayette, IN

Julia Git Disjunctive Programming Quantum Optimization Open-Source

aug '23 ► *dec '23* Visiting Scholar
FULL-TIME with David E. Bernal Neira

///// SELECTED PUBLICATIONS

jun '24 **Disjunctive Programming meets QUBO**
CACE 1ST with Pedro Ripper, Joshua Pulsipher, Joaquim Dias Garcia, Nelson Maculan & David E. Bernal Neira

sep '23 **QUBO.jl: A Julia Ecosystem for Quadratic Unconstrained Binary Optimization**
ARXIV 1ST with Pedro Ripper, Tiago Andrade, Joaquim Dias Garcia, Nelson Maculan & David E. Bernal Neira

aug '22 **Computation for Architecture, hybrid visual and textual language: Research developments and considerations about the implementation of structural imperative and object-oriented paradigms**
IJAC 2ND with Gonçalo Castro Henriques, Victor de Luca Silva, Luca Rédua Bispo & João Victor Fraga

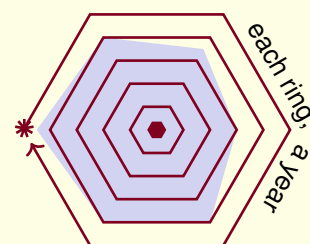
CONTACT /

📧 pedromxavier
in pedro-maciel-xavier
✉ pmaciex@purdue.edu
✉ pedrox@cos.ufrj.br
📞 pedro.ελ

LANGUAGES /

🇧🇷 native
🇬🇧 fluent
🇪🇸 intermediate
🇩🇪 basic

TREE RINGS /



power systems
machine learning
* optimization
software engineering
quantum computing
architecture



* ongoing ⓘ incoming