<div align="center">

Curricular Summary

Thiago Parente da Silveira

</div>

<div align="center">

Institute of Mathematics and Statistics - University of São Paulo

1010 Rua do Matão, Cidade Universitária, São Paulo - SP, Brazil

e-mail: thiagops@ime.usp.br; thiago.parente.mat@gmail.com   **webpage:** www.ime.usp.br/∼thiagops

</div>

Education

B.Sc., Applied Mathematics.
Federal University of Amazonas. Manaus - AM, Brazil (2011 - 2015).
Thesis: "A study of minimal paths based on graph theory and mathematical optimization".
Advisor: Prof. Dr. Sandro Dimy Barbosa Bitar.

M.Sc., Applied Mathematics.
Federal University of Amazonas. Manaus - AM, Brazil (2015 - 2017).
Thesis: "Studies on mathematical optimization models using functions with interval parameters".
Advisor: Prof. Dr. Sandro Dimy Barbosa Bitar.

Ph.D., Applied Mathematics.
University of São Paulo. São Paulo - SP, Brazil (2018 - expected 2022).
Collaborative period at Technische Universität Dresden. Dresden - SA, Germany (2020 - 2021).
Advisor: Prof. Dr. Gabriel Haeser .

Professional History

I started my undergraduate's degree in B.Sc. in Applied Mathematics at Federal University of Amazonas in 2011. During 2012-2013 I held an undergraduate fellowship by Amazonas Research Support Foundation (FAPEAM) for the project titled "Application of quadratic optimization to multivariate data analysis", which was awarded as the best scientific initiation project in Mathematics in 2013. In 2013-2014, I held another undergraduate fellowship by FAPEAM for the project titled "Mathematical fundamentals of combinatorial optimization and applications", and in 2014 I was awarded again as the best scientific initiation project in Mathematics. In 2014, I was awarded as the best academic performance in Applied Mathematics.

In 2015 I started my Master's degree in Applied Mathematics at Federal University of Amazonas and I was supported by CAPES. I finished that in 2017 and I was invited to give a talk about my Master's thesis in the 31st Brazilian Mathematical Colloquium. In the meantime, I got a position in 2016 as an Assistant Professor at Department of Mathematics of the Federal University of Amazonas.

In 2018, I started my Ph.D's degree in Applied Mathematics at University of São Paulo and since September 2020 I have been studying in a collaborative period at Technische Universität Dresden, in Germany. In 2018 and 2019 I participated in XII and XIII Brazilian Workshop on Continuous Optimization, respectively. In 2019 and 2021, I presented a talk in the 32nd and 33rd Brazilian Mathematical Colloquium, respectively.

Most relevant scientific results

Papers:

- R. Andreani, G. Haeser, L.M. Mito, H. Ramírez, **T.P. Silveira**. First- and second-order optimality conditions for second-order cone and semidefinite programming under a constant rank condition. Submitted on July 9th, 2021. Preprint available at arXiv.org/abs/2107.04693.

- R. Andreani, G. Haeser, L.M. Mito, H. Ramírez, D.O. Santos, **T.P. Silveira**. *Naive constant rank-type constraint qualifications for multifold second-order cone programming and semidefinite programming.* To appear in Optimization Letters (2021). doi.org/10.1007/s11590-021-01737-w.

- R. Andreani, E.H. Fukuda, G. Haeser, H. Ramírez, D.O. Santos, P.J.S. Silva, **T.P. Silveira**. *Erratum to: New Constraint Qualifications and Optimality Conditions for Second Order Cone Programs.* To appear in Set-Valued and Variational Analysis (2021). doi.org/10.1007/s11228-021-00573-5.

Talks:

- R. Andreani, G. Haeser, L.M. Mito, H. Ramírez, **T.P. Silveira**. *A constant rank-type constraint qualification for second-order cone programming.* 33rd Brazilian Mathematical Colloquium, 2021.

- G. Haeser, **T.P. Silveira**. *Some difficulties on obtaining strong second-order stationary points in NLP.* 32nd Brazilian Mathematical Colloquium, 2019.

- S.D.B. Bitar, **T.P. Silveira**. *Algumas ideias sobre otimização matemática utilizando funções com valores intervalares.* 31st Brazilian Mathematical Colloquium, 2017.

Theses and Technical reports:

- S.D.B. Bitar, **T.P. Silveira**. *Estudos sobre modelos de otimização matemática utilizando funções com parâmetros intervalares* (in Portuguese). Master's Thesis. Federal University of Amazonas, 2017. Available at Digital Library of Theses and Dissertations of UFAM.

- S.D.B. Bitar, **T.P. Silveira**. *Um estudo sobre caminhos mínimos com base na teoria dos grafos e otimização matemática* (in Portuguese). Undergraduate Thesis. Federal University of Amazonas, 2015.

- S.D.B. Bitar, **T.P. Silveira**. *Fundamentos matemáticos da otimização combinatória e aplicações* (in Portuguese). Technical report of PIBIC. Federal University of Amazonas, 2014. Available at UFAM International Repository.

- S.D.B. Bitar, **T.P. Silveira**. *Aplicação da otimização quadrática à análise de dados multivariados*(in Portuguese). Technical Report of PIBIC. Federal University of Amazonas, 2013. Available at UFAM International Repository.

Fellowships

Type: Doctorate (current).
Duration: March 1st, 2018 to August 31st, 2020. September 1st, 2021 to February 28th, 2022.
Title: Algoritmos de segunda-ordem em otimização não linear com propriedades fortes de otimalidade.
Supervisor: Prof. Dr. Gabriel Haeser.
Funding agency: FAPESP (grants 2017/12187-9).

Type: Research Internship Abroad - Doctorate.
Duration: September 1st, 2020 to August 31st, 2021.
Title: Second-order algorithms for nonlinear optimization with strong optimality properties.
Supervisor: Prof. Dr. Gabriel Haeser.
Funding agency: FAPESP (grants 2020/00130-5).

Type: Master's degree.
Duration: March 1st, 2015 to February 28th, 2017.
Title: Studies on mathematical optimization models using functions with interval parameters.
Supervisor: Prof. Dr. Sandro Dimy Barbosa Bitar.
Funding agency: CAPES.

Type: Undergraduate - PIBIC.
Duration: August 1st, 2013 to July 31st, 2014.
Title: Mathematical fundamentals of combinatorial optimization and applications.
Supervisor: Prof. Dr. Sandro Dimy Barbosa Bitar.
Funding agency: FAPEAM.

Type: Undergraduate - PIBIC.
Duration: August 1st, 2012 to July 31st, 2013.
Title: Application of quadratic optimization to multivariate data analysis.
Supervisor: Prof. Dr. Sandro Dimy Barbosa Bitar.
Funding agency: FAPEAM.

Links to the webpages

ORCID: https://orcid.org/0000-0001-6927-987X
Google Scholar: https://scholar.google.com.br/citations?user=1O5POOoAAAAJ&hl=pt-BR
Lattes: http://lattes.cnpq.br/8394858328168764
Research Gate: https://www.researchgate.net/profile/Thiago-Parente-Da-Silveira

Additional information

Date of birth: August 11, 1993 (28 years old).
Gender: Male.
Marital status: Single.
Children: None.
Languages: Portuguese (native) and English (intermediate).