VINICIUS JAMELI

⚲ UNICAMP - University of Campinas, Brazil

🏛 IMECC - Institute of Mathematics, Statistics and Scientific Computing

✉ E-mail   ⌂ Personal website   ℝᴳ Researchgate   ⅋ Google Scholar

ⓘ ORCID   in LinkedIn   ⊙ GitHub   ❧ Lattes

📅 Updated: February 18, 2023

EDUCATION

Date	Degree	Institution	Department
Ongoing	Bachelor	University of Campinas	Applied mathematics
12/2017	High school	Technical school of Campinas	-

PROFESSIONAL EXPERIENCE

Period	Company	Area	Role	Activities
07/2021 - 11/2021	Unisoma	Advanced analytics	Intern	Solved supply chain problems with linear programing using AIMMS

CONFERENCE ABSTRACTS [1]

[4] Vincius Jameli Cabrera and Aurelio Ribeirio Leite de Oliveira. "Planning IMRT with MLC: a linear approach with elastic constraints". In: *XXIX Scientific Initiation Congress of UNICAMP*. Campinas, Brazil: Galoá, Nov. 2021.

[3] Vincius Jameli Cabrera and Aurelio Ribeirio Leite de Oliveira. "Optimization of external beam radiation therapy". In: *Proceeding Series of the Brazilian Society of Computational and Applied Mathematics*. Vol. 9. Campinas, Brazil, 2022.

[2] Vincius Jameli Cabrera and Aurelio Ribeirio Leite de Oliveira. "Optimization of external beam radiation therapy". In: *Digital proceedings of the 4° Biomathematics Meeting*. Rio de Janeiro, Brazil, Apr. 2022.

[1] Vincius Jameli Cabrera and Aurelio Ribeirio Leite de Oliveira. "Optimization of external beam radiation therapy". In: *EURO 2022 Conference Handbook and Abstracts*. ESPOO, Finland, July 2022.

CONFERENCE ABSTRACTS IN PUBLISHING PROCESS

[1] Vincius Jameli Cabrera and Aurelio Ribeirio Leite de Oliveira. "Optimization of external beam radiation therapy". In: *XXX Scientific Initiation Congress of UNICAMP*. Campinas, Brazil, Oct. 2022.

PRESENTATIONS

[2] Vincius Jameli Cabrera and Aurelio Ribeirio Leite de Oliveira. *Optimization of external beam radiation therapy*. 3° Optimization Workshop. Botucatu, Brazil, Aug. 2022.

[1] Vincius Jameli Cabrera and Aurelio Ribeirio Leite de Oliveira. *Optimization of external beam radiation therapy*. Applied Mathematics Week (SEMAP). Campinas, Brazil, Aug. 2022.

---

[1] Repeating titles indicate the same project but at different stages of development.

Ongoing projects[2]

Title	Participants
Primal-dual predictor-corrector interior point algorithm for the fluence map optimization	Vinicius Jameli and Aurelio Ribeiro Leite de Oliveira
Optimization algorithms in DAO: the first systematic literature review	Mauricio Moyano, Vinicius Jameli, Keiny Meza, Gonzalo Tello, and Guillermo Cabrera-Guerrero
A novel database for IMRT planning	Mauricio Moyano, Vinicius Jameli, and Keiny Meza

Other projects

Year	Title	Summary
2022	Data structures	Data structures like binary search trees, hashing, queues, linked lists, and stacks, among others, with all their functionalities, were implemented in C
2021	Sudoku modeling	A traditional Sudoku and some variations were modelled and solved as integer programming problems
2021	News crawler	Together with the TradeMap engineers' software team, a news Crawler was developed specifically for the TradeMap mobile app
2020	Matrix envelope	A matrix envelope algorithm for sparse matrices was developed in Matlab, followed by a Gaussian-elimination, backward and forward substitution algorithm for this envelope
2020	Least square	Comparisons of different approaches to the least square problem were reported and tested in a curve-fitting model of COVID 19 cases

Outstanding courses

Year	Course	Institution
2017, 2018	Neuroscience course	Albert Einstein Israel Teaching and Research Institute

Awards

Year	Award title	Awarded by	Terms of award
2022	Best scientific initiation	Institute of Mathematics, Statistics and Scientific Computing	Received by the best scientific initiation project presented in the first semester of 2022
2017	Golden medal	Association Internationale Mathématiques sans Fronteriès	Received at the International Olympics Mathématiques sans Frontières
2014	Silver medal	Brazilian Astronomical Society	Received at the 17º Brazilian Astronomy and Astronautics Olympiad

---

[2]The authors expect to submit all projects for publication this year.

FUNDINGS

Year	Purpose	Granted by	Terms
2022	Conference travel grant	Institute of Mathematics, Statistics and Scientific Computing	Travel support for a conference in Finland
2022	Conference travel grant	Institute of Mathematics, Statistics and Scientific Computing	Travel support for a conference in Rio de Janeiro
2022	Conference travel grant	National Council for Scientific and Technological Development	Travel support for a conference in Botucatu
2020-2022	Research grant	National Council for Scientific and Technological Development	Research grant for scientific initiation projects

SKILLS

Julia ●●●●●●○○○○
C ●●●●●●○○○○
Matlab ●●●●●●○○○○
Git ●●●●●●○○○○
CPLEX ●●●●●○○○○○
Linux ●●●●●○○○○○
Python ●●●●●○○○○○
SQL ●●●○○○○○○○
AIMMS ●●●○○○○○○○
VBA ●●●○○○○○○○

AREAS OF EXPERTISE

- Optimization
- Operational research
- Matrix computations & numerical simulations
- Functional analysis
- Radiotherapy planning

LANGUAGES [3]

Idiom	Proficiency level	Certificate
Portuguese	Native	-
English	C2	EF SET
Spanish	A2	-

ACADEMIC REFERENCES

Name	Position	Institute	Contact
Kelly Cristina Poldi	Associate professor	IMECC	`kelly@ime.unicamp.br`
Aurelio Ribeiro Leite de Oliveira	Full professor	IMECC	`aurelio@po.ime.unicamp.br`
Paulo José da Silva e Silva	Full professor	IMECC	`pjssilva+unicamp@gmail.com`
Guillermo Cabrera-Guerrero	Associate professor	Escuela de Ingeniería Informática - PUCV	`guillermo.cabrera@pucv.cl`

PROFESSIONAL REFERENCES

Name	Position	Company	Contact
Juliana Simões Lepsch	Partner and executive manager	Unisoma	`juliana.simoes@unisoma.com`
Camila Salles	Product owner	Unisoma	`camila_2172@hotmail.com`

COMMENTS

Please visit my personal website for more details on my research and my Researchgate profile for pre-prints and reports.

---

[3]The EF SET certificate can be found at `https://www.efset.org/cert/paTvgp`