Gonzalo Jiménez

Ph.D. in mathematics

‣ Chilean

Skills

LaTeX/ TikZ 12+ yrs.

Python / Sage Matlab 4+ yrs.

HTML / CSS JavaScript 2+ yrs.

Spanish Native

English C1

French B1

Portuguese B1

Contact

📍 Valdivia
R. de los Ríos, Chile

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✉ gojimenez@ug.uchile.cl

🏠 https://gingfreecss17.github.io/

Biography

Mathematician, with research-oriented training in pure mathematics and the use of programming to analyze, understand phenomena and solve problems. My research is framed in the areas of Combinatorics, Soergel Bimodules, and Diagrammatic Calculus. I am interested in algorithms, graphic representation, and analysis of discrete structures.

Working experience

Member of Creative Committee for the PAES `2023/2024`
DEMRE
Universidad de Chile

Design, construction, and review of multiple-choice items for assessment tools for university selection in the field of mathematics.

Tutor in the Integration to Universitary Mathematics Program `Fall/2018`
Department of Mathematics
Universidad Católica

Supporting first and second year students in Calculus and Linear Algebra.

Tutor at Mathematics Helping Room `Fall/2017`
Department of Mathematics
Universidad Católica

Providing assistance in resolving mathematical queries for students across all disciplines.

Assistant of the Mathematical Reasoning course `Fall/2015`
Department of Mathematics
Universidad Católica

Calculus and ODE coursework tailored for students in Medicin.

Assistant of the Quantitative Reasoning course `Fall/2015`
Department of Mathematics
Universidad Católica

Logic, Probability and Statistics coursework tailored for students in Pedagogy.

Tutor at Mathematics Helping Room `Fall/2015`
Department of Mathematics
Universidad Católica

Providing assistance in resolving mathematical queries for students across all disciplines.

Assistant of the Ordinary Differential Equations course `Fall/2015`
Department of Mathematics
Universidad Católica

ODE coursework tailored for students in Engineering, Physics, and Astronomy.

Education

2023

Doctorado en Matemática (Ph.D.)

Universidad de Chile

Algebra - Combinatorics
Ph.D. thesis:"Counterexamples to the Forking Path Conjecture".

2015

Mestrado em Matemática (M.Sc.)

IMPA

Algebra - Combinatorics
Master thesis: "Tiles, Conway's tiling groups and some related problems".

2012

Licenciatura en Matemática (B.Sc.)

Universidad de Chile

Number Theory - Algebra
Investigation Unit: "Lattices and their behavior under completions".

Other Interests

▸ Cycling

▸ Running

▸ Swimming

Assistant of the Ordinary Differential Equations course	**Spring/2012**

Department of Mathematics
Universidad de Chile

Calculus and ODE coursework tailored for students in Biology, Chemistry and Engineering.

Assistant of the Linear Algebra course	**Fall/2011**

Department of Mathematics
Universidad de Chile

Linear Algebra course for Mathematics and Physics students

Member of Academic Committee	**2008 - 2015**

Scholar Championship of Mathematics (CMAT)
Universidad de Santiago

Creating, solving, evaluating, and proposing problems for the math olympiad. Grading student exams. Instructor for extracurricular workshops for outstanding students.

Scholaships/Awards

- Beca Conicyt de Doctorado Nacional *Chile, 2017*
- Bourse d'études Fondation Sciences Mathématiques de Paris *France, 2015*
- Bolsa de estudos CNPq *Brazil, 2013*
- Best undergraduate student in the generation *Chile, 2012*
- Beca Universidad de Chile *Chile, 2007*
- Maximum score in the national university entrance exam (PSU) *Chile, 2007*

Publications

- G. A. Jiménez. On the Forking Path Conjecture. *Journal of Algebra (accepted)*, 2023.

Additional studies

- Data Science Bootcamp - Fall 2024
  Talento Digital - Sence
- English as a Medium of Instruction - Spring 2022
  Postgraduate Department - Universidad de Chile
- Introduction to University Teaching - Spring 2021
  Postgraduate Department - Universidad de Chile
- Data structures with Python - Fall 2020
  Coursera - Universidad Austral
- Introduction to Programming with Python - Fall 2020
  Coursera - Universidad Austral

Valdivia, August 13, 2024

Gonzalo Jiménez