Matheus Venturyne Xavier Ferreira

PERSONAL DATA FEBRUARY 13, 2021

ADDRESS: 194 Nassau Street, Room 225, Princeton, NJ 08540

PHONE: +1 (609) 933 5270 EMAIL: mvxf@cs.princeton.edu

WEBPAGE: www.cs.princeton.edu/~mvxf/

RESEARCH INTERESTS

I'm broadly interested in Algorithmic Design under Uncertainty and the interplay of Algorithmic Game Theory, Information Security, Fairness and Policy.

EDUCATION

In Progress | Doctor of Philosophy in Computer Science, Princeton University

PhD Advisor: S. Matthew Weinberg

School of Engineering and Applied Sciences Award for Excellence (2020).

Dean's Grant (2016-2021).

Fellowship in Engineering and Applied Sciences (2016).

SEPT. 2018 | M.A. in COMPUTER SCIENCE at Princeton University

Committee: Mark Braverman, Ed. Felten, Ran Raz, Matt Weinberg.

JULY 2016 B.S. in COMPUTER ENGINEERING at Universidade Federal de Itajubá, Brazil, GPA: 93.3/100

Academic Accolade for best student (2016). Congratulations from Higher Counsel (2016).

 1^{st} place in Line Follower Robot Competition (2013).

JAN - DEC 2014 VISITING STUDENT, University of California San Diego, GPA: 3.92/4.00

Fully Funded Scholarship from Brazilian Federal Government.

George Varghese Espresso Prize (2020).

HONORS AND AWARDS

Tapia Scholarship, Tapia Conference	Sept 2020
• LATINE Fellow, Purdue University	July 2020
• 2020 CRA-WP Grad Cohort for URMD, CRA	March 2020
AGT Mentoring Workshop Grant, ACM	June 2019
• Motion of Applause, Municipal Chamber of Itabira	May 2016
• Undergraduate Research Fellowship at UFMG , Fapeming	Sept 2013
Undergraduate Research Fellowship at Unifei, Fapeming	Feb 2012

RESEARCH PAPERS (AUTHORS IN ALPHABETICAL ORDER)

1. Matheus V. X. Ferreira and S. Matthew Weinberg. Credible, truthful, and two-round (optimal) auctions via cryptographic commitments. In *Proceedings of the 21st ACM Conference on Economics and Computation*, EC '20, page 683–712, New York, NY, USA, 2020. Association for Computing Machinery

2. Tithi Chattopadhyay, Nick Feamster, Matheus V. X. Ferreira, Danny Yuxing Huang, and S. Matthew Weinberg. Selling a single item with negative externalities. In *The World Wide Web Conference*, WWW '19, page 196–206, New York, NY, USA, 2019. Association for Computing Machinery

WORKING PAPERS (AUTHORS IN ALPHABETICAL ORDER)

- 1. Matheus V. X. Ferreira and S Matthew Weinberg. Proof-of-stake mining games with perfect randomness. *Under review*, 2021
- 2. Matheus V. X. Ferreira, Daniel J. Moroz, David C. Parkes, and Mitchell Stern. Dynamic posted-price mechanisms as a blockchain transaction fee mechanism. *Under review*, 2021
- 3. Matheus V. X. Ferreira, Sally Hahn, S. Matthew Weinberg, and Catherine Yu. Stake griding attacks in algorand. *Working Paper*, 2021

WORK EXPERIENCE & LONG TERM VISITS

 Research Assistant, Harvard University Supervisor: Professor David Parkes June - Sept 2020

 Research Assistant, Princeton University Supervisor: Professor S. Matthew Weinberg June 2017 – Present

• Research Assistant, Universidade Federal de Itajuba Supervisor: Professor Carlos Henrique da Silveira Jul 2011 - Feb 2013

• Research Assistant, Universidade Federal de Minas Gerais Supervisor: Professor Fernando Afonso Santos Sept 2013 - Feb 2014

• Broadcom Corporation at San Diego, California Software Development Engineer Intern in Bluetooth/NFC Software Team Supervisor: David Hughes Jun-Sept 2014

SERVICE

Program Committee

- Cryptoeconomic Systems (2020).
- Global Challenges in Economics and Computation (2020)

Reviewing

- USENIX Security (2021)
- Games and Economic Behavior (2019 2020)
- ACM Advances in Financial Technologies (AFT) 2020
- Innovations of Theoretical Computer Science (ITCS) 2019, 2020
- Conference on Web and Internet Economics (WINE) 2018, 2019, 2020

LANGUAGES

PORTUGUESE: Mothertongue

ENGLISH: Fluent