

# Matheus Venturyne Xavier FERREIRA

## PERSONAL DATA

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## EDUCATION

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In Progress    Doctor of Philosophy in COMPUTER SCIENCE, **Princeton University**  
PhD Advisor: Matthew Weinberg

JULY 2016    B.S. in COMPUTER ENGINEERING at **Universidade Federal de Itajuba**, Itabira, Brazil  
GPA: 92.8/100

JAN-DEC 2014    Non-degree international student, **University of California, San Diego**  
GPA: 3.92/4.00

## WORK EXPERIENCE

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*Jun-Sept 2014* | Broadcom Corporation at San Diego, California  
*Software Development Engineer Intern in Bluetooth/NFC Software Team*

## RESEARCH PAPERS

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- **Selling a Single Item with Negative Externalities: To Regulate Production or Payments?**  
Tithi Chattopadhyay, Nick Feamster, Matheus V. X. Ferreira, Danny Yuxing Huang, S. Matthew Weinberg.  
In Proceedings of The Web Conference 2019.

## WORKING PAPERS

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- **Proof-of-Stack Blockchain Minting Games**  
Matheus V. X. Ferreira, S. Matthew Weinberg.
- **How to Force Mechanisms to Commit**  
Matheus V. X. Ferreira, S. Matthew Weinberg.

## TALKS

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June 2019	Theory of Computer Science Group, Princeton University <b>How to Force Mechanisms to Commit</b>
May 2019	The Web Conference 2019, San Francisco, CA <b>Selling a Single Item with Negative Externalities: To Regulate Production or Payments?</b>
December 2018	Gems of Theoretical Computer Science Seminar, Princeton University <b>Simple <math>\log \log \text{rank}</math> competitive algorithm for matroid secretary</b>
June 2018	Poster Session, 19th ACM EC 2018, Ithaca, NY <b>Mitigating Insecure Devices, to Regulate Consumers or Manufacturers?</b>
March 2018	Mechanism Design Seminar, Princeton University <b>The matroid secretary problem for minor-closed classes and random matroids</b>
October 2017	Gems of Theoretical Computer Science Seminar, Princeton University <b>Rational secret sharing and secure multi-party computation</b>
June 2017	Mechanism Design Seminar, Princeton University <b>Selling a Single Item with Negative Externalities: To Regulate Production or Payments?</b>

## COURSE WORK

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Open Problems in Algorithmic Game Theory, Theoretical Machine Learning, Advanced Cryptography, The Probabilistic Method, Advanced Algorithm Design, Probability in High Dimension, Advanced Computer Networks, Automated Reasoning about Software

## TEACHING EXPERIENCE

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Princeton University	
Spring 2018	Economics and Computation (COS 445)
Fall 2017	Computation Geometry (COS 451)
2015	Computer Security
2013	Objected-Oriented Programming (ECO 30)

## SOFTWARE

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Jun 2014	UNIVERSITY OF CALIFORNIA, SAN DIEGO <b>Vein – Rivers of Blood</b> Class Project Supervised by Geoff Voelker <ul style="list-style-type: none"><li>Developed a distributed, real-time, 3D, multiplayer survival race game of microorganisms in the human body using C++ and DirectX11.</li></ul>
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## HONORS AND AWARDS

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SEPT. 2016	Dean's Grant, Princeton University
SEPT. 2016	First Year Fellowship, Princeton University
JULY 2016	Academic Accolade for best student, Universidade Federal de Itajuba
DEC. 2014	George Varghese Espresso Prize, University of California, San Diego
JAN-DEC 2014	Brazil Scientific Mobility Program, fully-funded scholarship recipient University of California, San Diego
SEPT 2013	Fapemig Research Scholarship, LOTMine, Universidade Federal de Minas Gerais, Brazil
SEPT 2013	1 <sup>st</sup> Line Follower Robot Competition, Universidade Federal de Itajuba, Brazil
FEB 2012	Fapemig Research Scholarship, Universidade Federal de Itajuba, Brazil

## LANGUAGES

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PORTUGUESE:	Mothertongue
ENGLISH:	Fluent

## COMPUTER SKILLS

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Programming:	C/C++, Python, Java, Matlab, OpenGL, SQL, JavaScript
Others:	LINUX, Windows, Bash, GDB, Git, $\LaTeX$