# Marcel de Sena Dall'Agnol

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## Education

**University of Warwick**  Coventry, UK
PHD IN COMPUTER SCIENCE  Oct. 2019 - Jan. 2024 (ongoing)

**Instituto Nacional de Matemática Pura e Aplicada (IMPA)**  Rio de Janeiro, Brazil
MASTER'S IN MATHEMATICS  Mar. 2017 - Feb. 2019

**University of California, San Diego (UCSD)**  San Diego, USA
UNDERGRADUATE EXCHANGE PROGRAM IN COMPUTER SCIENCE  Jan. 2012 - Dec. 2012

**Universidade de São Paulo (USP)**  São Carlos, Brazil
B.S. IN MECHATRONICS ENGINEERING (WITH CERTIFICATE OF EMPHASIS IN COMPUTER SCIENCE)  Jan. 2009 - Dec. 2014

## Research Interests

Algorithms and complexity, coding theory, quantum computation and high-dimensional expanders.

## Internships

**Robotics Institute - Carnegie Mellon University**  Pittsburgh, USA
SUMMER INTERNSHIP  Jun. 2012 - Sep. 2012
Developed and deployed a web service for precision enhancement of GPS data collected by an autonomous vehicle.

**Physics Institute - Universidade de São Paulo**  São Carlos, Brazil
SCIENTIFIC INITIATION  Aug. 2010 - Jul. 2011
Designed, built and installed a temperature monitor for a Cesium atomic clock. Supported by a scholarship from CNPq.

## Teaching

**University of Warwick**  Coventry, UK
ASSISTANT TUTOR  Oct. 2019 - Dec. 2019
Taught seminar sessions for the *Complexity of Algorithms* module.

**IMPA**  Rio de Janeiro, Brazil
TEACHING ASSISTANT  Mar. 2019 - Jun. 2019
Assisted first-year master's students in the course *Algebra I*.

**Projeto Âncora**  Cotia, Brazil
EDUCATOR  Aug. 2014 - Dec. 2016
- Tutored groups of students in primary education with personalized learning;
- Oriented student projects and work groups on a variety of topics, including computer maintenance and informatics, bullying and harassment prevention and culinary studies;
- Assisted in the development of a web platform used to share and catalog students' and educators' work;
- Oriented study groups in mathematics;
- Gave talks and courses on the school's pedagogical approach.

**Emancipa**  São Carlos, Brazil
TEACHER  Apr. 2013 - Jul. 2014
Taught math and physics in a volunteer-run, free of cost preparation program for the Brazilian undergraduate admission exams.

**USP**  São Carlos, Brazil
TEACHING ASSISTANT  Feb. 2013 - Nov. 2013
Assisted first-year undergraduate students in two courses: *Analytic Geometry* and *Linear Algebra*.

# Talks and Publications

**CHI 2013** <span style="float:right">*Paris, France*</span>

MotionDraw: A Tool for Enhancing Art and Performance Using Kinect

(with D. G. Rodrigues, E. Grenader, F. Nos, T. Hansen and N. Weibel)

**SIICUSP 19** <span style="float:right">*São Carlos, Brazil*</span>

Temperature Monitoring System for an Atomic Clock

(with D. V. Magalhães)

**IMPA Colloquium** <span style="float:right">*Rio de Janeiro, Brazil*</span>

A Crash Course on the Theory of Computation

**CryptoRave 2018** <span style="float:right">*São Paulo, Brazil*</span>

The Mathematical Beauty of Cryptography

# Honours and Qualifications

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| 2019 | **Centre for Doctoral Training postgraduate studentship**, University of Warwick |
| 2018 | **Doctorate-level coursework: Algebraic Curves, Commutative Algebra, Probability and Statistics**, IMPA |
| 2017 | **Master's scholarship**, CNPq |
| 2013 | **OnDaF**, German CEFR Level B1 |
| 2012 | **Science Without Borders undergraduate exchange scholarship**, CAPES |
| 2007 | **CPE**, English CEFR Level C2 |

# Conferences/Events Attended

**AlgoUK** <span style="float:right">*Coventry, UK*</span>
<span style="float:right">*Sep. 2019*</span>

**CIMPA Research School on *Elliptic Curves: Arithmetic and Computation*** <span style="float:right">*Montevideo, Uruguay*</span>
<span style="float:right">*Feb. 2019*</span>

**International Congress of Mathematicians** <span style="float:right">*Rio de Janeiro, Brazil*</span>
<span style="float:right">*Aug. 2018*</span>

**Latin American Week on Coding and Information** <span style="float:right">*Rio de Janeiro, Brazil*</span>
<span style="float:right">*Jul. 2018*</span>

**30th and 31st Brazilian Colloquia of Mathematics** <span style="float:right">*Rio de Janeiro, Brazil*</span>
<span style="float:right">*Jul. 2015 and Jul. 2017*</span>

# Skills

**Languages** Portuguese and English (fluent), Spanish (intermediate), German (basic)

**Programming** Python, C/C++, Ruby/Rails, Matlab/Octave, LaTeX

# Extracurricular and Volunteer Work

**Intenational Congress of Mathematicians** <span style="float:right">*Rio de Janeiro, Brazil*</span>

STAFF <span style="float:right">*Aug. 2018*</span>

Served as attaché to the Chern Medal prize winner.

**International Mathematical Olympiad** <span style="float:right">*Rio de Janeiro, Brazil*</span>

STAFF <span style="float:right">*Jul. 2017*</span>

Assisted country representatives and worked on interpreting and proofreading.

**Coursera, Khan Academy, ProtonMail**

TRANSLATOR <span style="float:right">*May 2014 - Oct. 2017*</span>

Translated and proofread subtitles for Coursera's *Machine Learning*, *Cryptography I* and *Cybersecurity and its Ten Domains* courses, Khan Academy's Calculus module and ProtonMail's web service and mobile application (75,000 words in total).