

Curriculum Vitae

Simon Rubinstein-Salzedo

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PERSONAL DETAILS

Date of birth: June 17, 1985
Place of birth: Stanford, California, USA
Citizenship: United States of America

EDUCATION

2007– Graduate student in mathematics, Stanford University, Stanford, California, USA.

2003–2007 College of Creative Studies, University of California, Santa Barbara, California, USA. B.S. Mathematics, Minor Music. GPA: 3.86/4.00.

1999–2003 Homestead High School, Cupertino, California, USA.

1996–1999 Challenger School, Sunnyvale, California, USA.

1990–1996 Mid Peninsula Jewish Community Day School, Palo Alto, California, USA.

RESEARCH INTERESTS

Complex Analysis, Homological Algebra, Algebraic Number Theory

WORK AND TEACHING EXPERIENCE

- 2007 Combinatorial Game Theory. This is a class I taught in the College of Creative Studies. The entire class was of my own design. We worked through *Winning Ways for Your Mathematical Plays, Volume 1* by Elwyn Berlekamp, John Conway, and Richard Guy and then covered some other topics from the later volumes as well as applications of combinatorial game theory to go and chess.
- 2006–2007 UCSB Putnam Seminar/Advanced Putnam Seminar. I was the organizer; it was my responsibility to teach students problem-solving techniques and find suitable additional problems.
- 2003–2005 Course assistant for many mathematics courses for high school students aspiring to win mathematics competitions at the regional, national, and international levels run by the Art of Problem Solving (<http://www.artofproblemsolving.com/>).
- 2004 Summer internship at the Art of Problem Solving. I was responsible for designing an intermediate level course on trigonometry and complex numbers and some of the lectures and exams for an olympiad level course on problem solving techniques.
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SEMINAR TALKS

1. “A Prelude to Pick-Nevalinna Interpolation,” UCSB Seminar on Operator Algebras and Functional Analysis (October 2006).
 2. “Consequences of the *abc* Conjecture,” UCSB Math Club (January 2007).
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RESEARCH PAPERS

1. “A Hilbert Space Approach to Bounded Analytic Interpolation” (with J. Danciger). Submitted.
 2. “Finitistic Dimensions of Monomial Algebras.” <http://www.complexzeta.com/monalg.pdf>. Undergraduate senior thesis, advised by Birge Huisgen-Zimmermann. Unpublished.
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GRADUATE COURSES TAKEN

1. Math 221A, Point-Set Topology, Fall 2003.

2. Math 201ABC, Real Analysis, Fall 2003, Winter 2004, Spring 2004.
3. Math 202ABC, Complex Analysis, Fall 2004, Winter 2005, Spring 2005.
4. Math 220ABC, Modern Algebra, Fall 2004, Winter 2005, Spring 2005.
5. Math 209, Set Theory, Winter 2005.
6. Music 212A, Canon and Fugue, Winter 2005.
7. Math 231A, Lie Groups and Lie Algebras, Fall 2005.
8. Econ 210B, Game Theory, Fall 2005.
9. Pstat 213A, Probability Theory and Stochastic Processes, Fall 2005.
10. Math 260Q, Noncommutative Noetherian Rings and Quantum Groups, Fall 2005, Winter 2006.
11. Math 240ABC, Differential and Riemannian Geometry, Fall 2005, Winter 2006, Spring 2006.
12. Math 225AB, Algebraic Number Theory, Winter 2006, Spring 2006.
13. Math 236AB, Homological Algebra, Winter 2006, Spring 2006.
14. Math 227A, Khovanov Homology, Fall 2006.
15. Math 260Q, Combinatorics, Fall 2006.
16. Math 237AB, Algebraic Geometry, Fall 2006, Winter 2007.
17. CompSci 220, Theory of Computation and Complexity, Winter 2007.
18. Math 227B, Combinatorial 3-Manifolds, Winter 2007.
19. Math 232A, Algebraic Topology, Winter 2007.
20. Math 225AB, Elliptic Curves, Winter 2007, Spring 2007.
21. Math 260E, Distributions, Fourier Transforms, and Paley-Wiener Theory, Spring 2007.
22. Math 260Q, Number Theory and Cryptography, Spring 2007.
23. CompSci 290A, Quantum Information and Quantum Computing, Spring 2007.

ACCOMPLISHMENTS

1. Qualified for the USA Mathematical Olympiad (USAMO) 2001, 2002, 2003.
2. Qualified for the Mathematical Olympiad Summer Program (MOSP) 2002.
3. National High Honors, American Regions Math League (ARML) 2003.
4. Four-time member of UCSB team for the William Lowell Putnam Mathematics Competition (2003–2006). Best individual rank: 117 (46 points), 2006. Best team rank: 12 (out of 411 teams from across USA and Canada), 2004.
5. Honorable mention, National Science Foundation Graduate Research Fellowship Program (NSF GRFP) 2007.
6. Raymond L. Wilder Award for Outstanding Achievement as an Undergraduate Student of Mathematics 2007.
7. Distinction in the Major, 2007.

NON-MATHEMATICAL HOBBIES

1. Music — Cello (I have played with El Camino Youth Symphony, Palo Alto Chamber Orchestra, and the UCSB Symphony Orchestra), Piano (Certificate of Merit, Level 9), Composition
2. Chess (US Chess Federation rating 1779, Quick rating 1696)
3. Calligraphy

REFERENCES

1. Birge Huisgen-Zimmermann, Department of Mathematics, University of California, Santa Barbara.
Email: birge@math.ucsb.edu
2. Mihai Putinar, Department of Mathematics, University of California, Santa Barbara.
Email: mputinar@math.ucsb.edu
3. Richard Rusczyk, Art of Problem Solving.
Email: rusczyk@artofproblemsolving.com

4. Charles Ryavec, College of Creative Studies, University of California, Santa Barbara (retired).
Email: ryavec@math.ucsb.edu
5. Milen Yakimov, Department of Mathematics, University of California, Santa Barbara.
Email: yakimov@math.ucsb.edu