

## **Alexander R. Rusciano**

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### **Education**

#### **Carleton College**, Northfield, MN (2010-Present)

- B.A. in Mathematics, expected June 2014
- Cumulative GPA: 3.93; Major GPA: 4.0
- CS coursework includes Operating Systems, Algorithms, Parallel & Distributed Computing

#### **Budapest Semesters in Mathematics**, Budapest, Hungary (September 2012 – December 2012)

- *Courses*: Measure Theory, Functional Analysis, Topics in Geometry, Differential Geometry, Algebraic Topology

#### **Canada/USA Mathcamp** (July 2010 – August 2010)

- Attendee at summer program sponsored by the American Mathematical Society

#### **St. Thomas High School**, Houston, TX (2006-2010)

- Valedictorian (1/180)

### **Research Experience**

#### **Director's Summer Program, National Security Agency**, (June 2012-August 2012)

- Participant in 12 week summer research program at NSA headquarters
- Implemented and optimized cryptographic algorithms for a variety of different computer architectures
- Developed and applied strategies of automated generation of C source code
- Presented results to CCR-Princeton and wrote technical paper (internally published)

#### **SCAMP, Center for Communications Research (IDA-CCR – La Jolla)**, (June 2013-August 2013)

- Adjunct researcher at SCAMP (10 week summer conference sponsored by Institute for Defense Analyses)
- Applied mathematics to solve problems of interest to cryptography
- Presented results in technical talks and papers (internally published)

### **Math Competitions**

- Putnam - Score 29, Top 500 List (December 2012)
- Budapest Semesters in Mathematics Competition (November 2012) - placed third
- Konhauser Math Competition (a regional contest) - Team placed fifth (2011), second (2012), and second (2013)

### **Programming Skills**

- Proficient in C, C++; Java, Python, Magma experience
- Multithreaded and Concurrent programming
- Graphics programming with OpenGL
- Personal project available to view: <https://github.com/alexrusciano/Rotations>

### **Miscellaneous**

- Held TS//SCI security clearance for NSA and CCR positions
- SAT: 800 Verbal / 800 Quantitative / 770 Writing
- GRE: 166 Verbal / 170 Quantitative / 4.5 Writing
- Math Subject GRE: 870 (91%)