

Alexander Wood, *Ph.D. Candidate in Computer Science*

CONTACT INFORMATION Alexander Wood *E-mail:* awood@gradcenter.cuny.edu
The Graduate Center, *Website:* <http://awood.ws.gc.cuny.edu/>
CUNY *GitHub:* <https://github.com/alexwood2>

RESEARCH INTERESTS Cryptography, machine learning, algorithmic group theory

EDUCATION **The Graduate Center, CUNY**, New York, New York
 • Ph.D Candidate in Computer Science
 • 2015-Present
 • Advisor Dr. Delaram Kahrobaei
The Graduate Center, CUNY, New York, New York
 • Graduate Mathematics Coursework
 • Passed qualifying exams in abstract algebra and algebraic topology
 • 2013-2015
DePaul University, Chicago, Illinois
 • M.S. Pure Mathematics, with distinction
 • Passed qualifying examinations in algebra and analysis
 • 2012-2013, 2015
DePaul University, Chicago, Illinois
 • B.A. Pure Mathematics, Summa Cum Laude
 • 2008-2012

PROGRAMMING SKILLS • Languages: C++, Python
 • Graphics & Typesetting: LaTeX, Beamer, TikZ, gnuplot, yEd
 • Databases: PostgreSQL, SQLite
 • Other: HTML/XML, GAP

TEACHING *New York University*, Adjunct Lecturer **2015-2016**
 • Python Instructor, Opportunity Program 2016
 • Precalculus Instructor, Opportunity Program 2015-2016
 • Calculus Instructor, Opportunity Program 2015
New York City College of Technology, Adjunct Lecturer **2016**
 • Computer Programming and Problem Solving with Python 2016
John Jay College of Criminal Justice, Adjunct Lecturer **2015-2016**
 • Calculus II Instructor 2016
 • College Algebra Instructor 2015
 • Precalculus Instructor 2015
DePaul University, Graduate Teaching Assistant **2012-2013**
 • Real Analysis I & II, Group Theory

PRESENTATIONS	<i>Generic-Case Complexity in Algorithmic Group Theory</i> , Lecture, Algorithmic Group Theory Graduate Course	2016
	<i>The Generic Case Complexity of Group-Theoretic Problems</i> , Candidacy Exam	2016
	<i>MixCoin: A Method For Anonymous Transactions In BitCoin</i> , Digital Currencies course presentation	2016
	<i>A Survey of Definitions of Generic-Case Complexity</i> , GC Cryptography Seminar	2016
	<i>Weighted Threshold Secret Sharing</i> , Cryptographic Protocols course presentation	2015
	<i>Cramer-Shoup Encryption</i> , GC Cryptography Seminar	2015
	<i>Shor's Algorithm for Factoring in Polynomial Time on a Quantum Machine</i> , GC Cryptography Seminar	2015
	<i>Generic-Case Complexity</i> , GC Cryptography Seminar	2015
PAPERS	<i>The Generic-Case Complexity of Group-Theoretic Problems</i>	2016
	<ul style="list-style-type: none"> • Survey for candidacy exam 	
	<i>Behavior of Distance Metrics in High Dimensional Spaces</i>	2015
	<ul style="list-style-type: none"> • Machine Learning course project 	
	<i>Quantization and Statistical Analysis of Data Using a Bayes Decision Rule</i>	2015
	<ul style="list-style-type: none"> • Machine Learning course project • Co-authored with Matteo Campanelli and Kelsey Horan 	
	<i>Weighted Threshold Secret Sharing</i>	2015
	<ul style="list-style-type: none"> • Cryptographic Protocols course project • Co-authored with Nikolas Melissaris 	
LEADERSHIP	<i>Doctoral Student Council, Computer Science Rep.</i>	2016-2017
	<i>Computer Science Students Association, Chairperson</i>	2016-2017
	<ul style="list-style-type: none"> • Graduate Council Member • Executive Committee, Curriculum Committee, and Elections Committee 	Spring 2016 2016-2017
	<i>GC Cryptography Seminar, Co-Organizer</i>	2016
	<i>Doctoral Student Council, Mathematics Representative</i>	2015
	<i>American Mathematical Society, Member</i>	2010, 2013-2015

FELLOWSHIPS	<i>CUNY Computer Science Fellowship</i>	2016
	<i>University Fellowship, Hunter College</i>	2016
	<i>CUNY Research Foundation Research Assistantship</i>	2016
	<i>CUNY Graduate Assistantship B, Computer Science</i>	2015-2016
	<i>CUNY Math Fellowship</i>	2013-2015
	<i>CUNY Graduate Assistantship B, Mathematics</i>	2013-2015
	<i>DePaul Graduate Mathematics Fellowship</i>	2012-2013
OTHER WORK	<i>Wohl Communication Services, Reader, Recorder, and Proctor for Graduate Examinations (GRE, MCAT, & FINRA)</i>	2013-2016
	<i>The Graduate Center Information Technology, IT Aide</i>	2013-2014
	<i>DePaul Information Services, IS Student Assistant</i>	2009-2011