

Jess Woods

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EDUCATION	Ph.D. Student in Computer and Information Science	Aug 2020 – Present
	University of Pennsylvania	GPA: 4.0
	B.S. in Computer Science & B.A. in Studio Art, <i>Highest Distinction</i>	Aug 2015 – May 2019
	University of North Carolina at Chapel Hill	GPA: 3.9
RESEARCH	Graduate Research Assistant, Distributed Systems Laboratory	Aug 2020 – Present
	University of Pennsylvania	
	<i>Current Project</i>	Arithmetization of optimization algorithms for zero-knowledge proofs
	<i>Advisor</i>	Prof. Sebastian Angel
	<i>Research Area</i>	cryptography, security, programming languages
	Post Baccalaureate Research Intern	
	Oak Ridge National Laboratory, TN	
	▪ Computer Science Research Group	Aug 2019 – Jul 2020
	<i>Project</i>	Programming models for fully homomorphic encryption on a supercomputer
	<i>Advisor</i>	Dr. Oscar Hernandez
	<i>Focus</i>	cryptography, parallel programming, programming languages & models
	▪ Center for Molecular Biophysics	Jun 2019 – Aug 2019
	<i>Project</i>	Fast open source protein folding
	<i>Advisor</i>	Dr. Ada Sedova
	<i>Focus</i>	molecular dynamics codes, high performance computing
TALKS		
“Performance and portability of abstract algebra operations in C++, Python, and Julia,” <i>P3HPC</i> , Sep 2020.		
“Parallelization of Fully Homomorphic Data Encoding,” <i>Oak Ridge National Laboratory Ignite Talks</i> , Dec 2019		
WORKSHOP		
J. Woods, M. Baker, M. Thavappiragasam, A. Sedova, O. Hernandez, V. Sarkar, “Using Python for Improved Productivity in HPC and Data Science Applications: the Time is Now,” in <i>Collegeville Workshop</i> , Apr 2020.		
SKILLS	Programming Languages	C, C++, Java, Python, Coq, Haskell, Julia, Verilog, Assembly/MIPS FORTRAN, JavaScript, HTML, CSS, TypeScript
	Software Tools & Systems	Git, Bash, \LaTeX , Linux, OpenMP, MPI, CUDA
TEACHING	Teaching Assistant, Discrete Mathematics , UNC Chapel Hill	Aug 2018 – May 2019
	Led weekly recitations, solo lectures on <i>Intro to Proofs</i> , <i>Induction</i> , and <i>Set Theory</i>	
	Solo Instructor, K-12 Math , Reading Writing Arithmetic Center, NC	Apr 2018 – Aug 2018
MISC WORK	Visual artist : oil painting, screenprinting, murals, photography, zine-making	2015 – Present
	Hundreds of prints/paintings sold, exhibited nationally, permanent collections in NYC, Durham NC	
	Barber , Pop-Up Barbershop, NC	2016 – 2019
	Beekeeper , Carolina Beekeeping Club, NC	2016 – 2018
	Drumline Instructor , Polk County High School, NC	2015 – 2016
	House painter , Elite Shutters and Blinds, NC	2015
AWARDS	Construction, carpenter, landscaper, (picture) framer , Booth Framing Arts, NC	2014 – 2015
	Best Ignite Speaker , Oak Ridge National Lab	2019
	Best Student Abstract , Oak Ridge National Lab	2019
	James M. Johnston Scholar , UNC Chapel Hill	2015 – 2019
	Full-tuition academic merit scholarship	
	Jonathon E. Sharpe Award, Kachergis Award , UNC Chapel Hill	2017 – 2018

