

Ama A. Koranteng

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<https://amakora0.github.io>

EDUCATION	Ph.D. Computer Science , JOHNS HOPKINS UNIVERSITY <i>Advisor: Michael Dinitz</i>	Sept 2020 - present
	M.S.E. Computer Science , JOHNS HOPKINS UNIVERSITY	Dec 2022
	B.S. Mathematics , MASSACHUSETTS INSTITUTE OF TECHNOLOGY	Feb 2020
EXPERIENCE	Research Intern , MIT THEORY OF COMPUTATION GROUP <i>Advisor: Dr. Jayson Lynch</i>	June 2018 - May 2019
	<ul style="list-style-type: none">• Read and synthesized papers on gadget abstractions used to prove computational complexity of various games• Rigorously defined and reconciled new and existing frameworks and gadget abstractions• Solved open problems related to these papers, including designing algorithms and proving hardness results	
	Autonomy Intern , NORTHROP GRUMMAN AEROSPACE SYSTEMS <i>Supervisor: Dr. Jonathan Las Fargeas</i>	Jun–Aug 2017
	<ul style="list-style-type: none">• Designed distributed algorithms for collaborative drones• Implemented algorithms in C# using behavior trees in the Unity game engine	
	Autonomy Intern , NORTHROP GRUMMAN AEROSPACE SYSTEMS <i>Supervisor: Dr. Jonathan Las Fargeas</i>	Jun–Aug 2016
	<ul style="list-style-type: none">• Created MATLAB models and Java programs to model complex offensive and defensive aircraft combat maneuvers	
PUBLICATIONS	with Michael Dinitz, Guy Kortsarz, and Zeev Nutov Improved Approximations for Relative Survivable Network Design <i>Workshop on Approximation and Online Algorithms (WAOA), 2023</i>	
	with Michael Dinitz and Guy Kortsarz Relative Survivable Network Design <i>International Conference on Approximation Algorithms for Combinatorial Optimization Problems (APPROX), 2022</i>	
AWARDS	NSF Graduate Research Fellowship	2022
	GEM Fellowship (declined)	2022
	Graduate Fellowship for STEM Diversity (declined)	2022
	Wu and Zhang Endowed Graduate Student Fellowship	2020
	Google Computer Science Research Mentorship Program	2019
	Bloomberg Grace Hopper Travel Grant	2016
	Generation Google Scholarship	2014
	NCWIT Aspirations in Computing Award	2013
SKILLS	\LaTeX , Java (intermediate), Python (beginner), C# (beginner)	

SERVICE	PhD Representative, JHU CS DIVERSITY AND INCLUSION COMMITTEE	2022
	<ul style="list-style-type: none"> • Worked with department administrators to help start and facilitate the JHU CS PhD Mentor Hour series, where senior PhD students give advice to junior students on a variety of topics in a casual, discussion-based setting 	
	Co-Organizer, JHU CS THEORY SEMINAR	Spring 2022
	Conference Subreviewer	
	<ul style="list-style-type: none"> • ESA 2023 • ICALP 2023 • SIROCCO 2023 	
	Peer Mentor, MIT STUDENT SUPPORT SERVICES	2017-2019
	<ul style="list-style-type: none"> • Provided guidance, emotional and logistic support for undergraduate students through their leaves of absence (particularly students leaving for health reasons) 	
	Co-Organizer and Educator, MIT EDUCATIONAL STUDIES PROGRAM	2014-2016
	<ul style="list-style-type: none"> • Organized the MIT Summer HSSP program, a summer extracurricular education program for over 100 middle and high school students • Organized the MIT Cascade program, a free after-school high-school program for over 30 low-income Boston-area students • Interviewed and hired teachers, taught courses, advertised for both programs 	
TEACHING	Co-Advisor and Mentor, JHU WISE HIGH SCHOOL PROGRAM	Summer 2023
	<ul style="list-style-type: none"> • Co-advised and mentored a Baltimore city high school student • Introduced the student to graphs, graph algorithms, and basic graph theory concepts • Guided the student through a programming project in which they implemented graph algorithms in Python 	
	Teaching Assistant, ALGORITHMIC GAME THEORY (JHU)	Spring 2022
TALKS	Improved Approximations for Relative Survivable Network Design	
	WAOA 2023, <i>Amsterdam, The Netherlands</i>	Sept 2023
	Relative Survivable Network Design	
	APPROX 2022, <i>Online</i>	Sept 2022