

Ian H. Dardik, B.S.

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Education

University of Connecticut Storrs, CT	August 2010 - May 2014
School of Engineering, B.S. <i>Computer Science</i>	Cum GPA: 3.72/4.00
School of Liberal Arts and Sciences, B.S. <i>Mathematics</i>	Cum GPA: 3.72/4.00
Northeastern University Boston, MA	September 2020 - December 2021
M.S. <i>Computer Science</i>	Cum GPA: 4.00/4.00
Northeastern University Boston, MA	Spring 2022
College of Professional Studies, Non-Degree Program.	

Professional Experience

Factset Research Systems , Manager, Senior Software Engineer	July 2014 - February 2020
<ul style="list-style-type: none">- Key technologies: C++, Valgrind, Linux.- Managed six total employees during my FactSet career.- Responsible for Monte Carlo simulations, Multi-Asset Class risk, and factor-based risk models.- Managed team responsibilities including project allocation and approval of code submissions.- Collaborated with stakeholders to define project scope and timelines for key clients.- Introduced an iterator based library to the Risk Analytics code base, yielding a 10% program speedup to our core covariance matrix code path.- Created a domain specific language for defining risk models, reducing implementation time from 2-3 months to one day.- Boston Engineering Internship Co-coordinator. Conducted technical interviews and co-managed the internship program.- Voluntarily resigned in February 2020 to enter academia.	
Northeastern University, Tripakis Lab , Research Assistant	Summer 2021, Spring 2022
<ul style="list-style-type: none">- Key technologies: TLA+, TLA+ Proof System (TLAPS), Ivy- Utilized TLA+/TLAPS to verify the <i>MongoRaftReconfig</i> distributed consensus protocol.- Active research in inductive invariant synthesis.	

Teaching Experience

MentorWorks Education Capital Educational Lecturer	
Brandeis University, Mathematical Society.	Fall 2017
<i>The Cantor Set and Applications to Topology</i>	
Middlesex Community College, Business and Economics Club.	Fall 2017
<i>A Simple AI Algorithm for a Tough Business Problem.</i>	
Northeastern University	
CS2800: Logic And Computation, <i>Teaching Assistant</i> (approx. 130 students)	Fall 2021
CS3520: Programming In C++, <i>Teaching Assistant</i> (approx. 110 students)	Fall 2020, Spring 2021

Awards

Deans List, University of Connecticut School of Liberal Arts and Sciences & Engineering	Fall 2011 - Spring 2014
Upsilon Pi Epsilon (National Honor Society for Computer Science)	December 2012
Pi Mu Epsilon (National Honor Society for Mathematics)	April 2014
Khoury Research Apprenticeship Award	Spring 2021, Fall 2021

Publications

- [1] William Schultz, **Ian Dardik**, and Stavros Tripakis. Formal verification of a distributed dynamic reconfiguration protocol. arXiv:2109.11987 [cs.DC], 2021. **Accepted for publication to CPP 2022.**
- [2] William Schultz, Siyuan Zhou, **Ian Dardik**, and Stavros Tripakis. Design and analysis of a logless dynamic reconfiguration protocol. arXiv:2102.11960 [cs.DC], 2021. **Accepted for publication to OPODIS 2021.**