Benno	Stein

$+44\ 7787\ 003683$		London, UK	
benno.stein@gmai	1.com	bennostein.org	
EDUCATION	University of Colorado, Boulder, CO		
	Doctor of Philosophy Computer Science	2017 - 2021	
	Advisor: Bor-Yuh Evan Chang	2011 2021	
	Advisor. Dor Tuli Livan Onang		
	University of Colorado, Boulder, CO		
	Master of Science, Computer Science	2015 - 2017	
	Williams College, Williamstown, MA		
	Bachelor of Arts, Computer Science and Mathematics	2011 - 2015	
EXPERIENCE	Software Engineer	SkinLabs	
(INDUSTRY)	Sentember 2023 – present	London UK (remote)	
(IIIDOSIIII)	Working on infrastructure for incremental and reactive system	ame using the Skip program-	
	ming language. SkipLabs is an early-stage startup at which I am the fifth engineer		
	ming ranguage. Skiphabs is an early stage startup at which	r ann the mon engineer.	
	Software Engineer	Meta	
	Feb. 2022 – August 2023	London, UK	
	Worked on incremental algorithms and infrastructure for	the Infer static analyzer, as	
	a member of the Research on Analysis and Languages a	t Meta (ReaLM) team and	
	goal-directed symbolic execution of LLVM bitcode as a n	nember of the Incorrectness	
	Logic Lab.		
	Software Engineer Intern	Facebook	
	Fall 2019	London, UK	
	Implemented new abstract domains and formalized correctn	less guarantees of the SLEdge	
	symbolic executor.		
	Software Engineer Intern	Google	
	Summer 2018	Sunnyvale, CA	
	Worked on the open-source Error Prone static analyzer, im	proving the Java nullability	
	analysis and implementing a novel nullness type inference	algorithm.	
	Software Engineer Intern	Uber	
	Summer 2017	Palo Alto, CA	
	Designed and built a refinement type-based static analysis	to detect threading defects	
	in functional-reactive Android applications.	0	
FYDEDIENCE	Posoarah Assistant Univ	regity of Colorado Boulder	
(ACADEMIA)	2015 2021	Boulder CO	
	Porformed research under Prof. Bor Vuh Evan Chang in t	bo Programming Languages	
	and Varification Group, studying program analysis and varification with a focus on		
	incremental and demand-driven abstract interpretation.		
	Course Assistant/Teaching Assistant Univ	versity of Colorado, Boulder	
	Fall 2017. Summer 2019. Spring 2020	Boulder CO	
	Ran office hours, helped design problem sets and exams	and offered one-on-one tu-	
	toring sessions in both graduate and undergraduate level Compiler Design and Pro-		
	gramming Languages courses. As a course assistant, addit	ionally designed and taught	

approximately 10 lectures per semester, in both remote and in-person formats.

	Research Assistant Universion Summer 2014	sity of Michigan Ann Arbor, MI	
	Performed research under Prof. Michael Wellman in the Strategic Restudying machine learning-based high-frequency trading algorithms game-theoretic models.	easoning Group, using empirical	
REFEREED PUBLICATIONS	Interactive Abstract Interpretation with Demanded Summar Benno Stein, Bor-Yuh Evan Chang, and Manu Sridharan. 2024. In tions on Programming Languages and Systems (TOPLAS).	ization ACM Transac-	
	Demanded Abstract Interpretation Benno Stein, Bor-Yuh Evan Chang, and Manu Sridharan. 2021. In Proceedings of the ACM SIGPLAN International Conference on Programming Language Design and Implementation (PLDI).		
	Static Analysis with Demand-Driven Value Refinement Benno Stein, Benjamin Barslev Nielsen, Bor-Yuh Evan Chang, and 2019. In Proceedings of the ACM SIGPLAN International Confer Oriented Programming, Systems, Languages, and Applications (OOPS	Anders Møller. ence on Object- ELA).	
	Safe Stream-based Programming with Refinement Types Benno Stein, Lazaro Clapp, Manu Sridharan, and Bor-Yuh Evan C Proceedings of the IEEE/ACM International Conference on Automat gineering (ASE).	Chang. 2018. In ed Software En-	
AWARDS AND	Ralph J. Slutz Student Excellence Award, CUB CS Dept.	2021 - 2022	
HONORS	Outstanding Research Award, CUB CS Dept.	2020 - 2021	
	Distinguished Student Speaker Award, CUB CS Dept.	2018	
	Outstanding Service Award, CUB CS Dept.	2017 - 2018	
	Dean's Graduate Assistantship, CU Boulder	2015 - 2016	
	ACM Student Research Competition, PLDI, 2nd Place	2016	
SPEAKING	Infer Workshop, PLDI '23	June 2023	
	ConVeY Seminar, TU Munich	July 2022	
	Dissertation Defense, CU Boulder	March 2022	
	Thesis Proposal, CU Boulder	Spring 2021	
	Paper and Poster Presentation, PLDI '21 (virtual)	Summer 2021	
	Paper and Poster Presentation, OOPSLA '19	Fall 2019	
	Paper Presentation, ASE '18	Summer 2018	
	Graduate Research Forum, CU Boulder	Fall 2017	
	PL & Verification Seminar, CU Boulder	Fall 2017	
	Student Research Presentation, Oregon PL Summer School	Spring 2016	
	ACM Student Research Competition, PLDI	Spring 2016	
	Math Department Colloquium, Williams College	Fall 2014	
	REU Research Forum, University of Michigan	Summer 2014	
	Hudson River Undergraduate Math Conference	Spring 2013	
SEDVICE	Chain DhD Student E sults Secure C	2016 2017	
SERVICE	Unan, FIID Student faculty Search Committee	2010 - 2017	

Organized and participated in student interviews for visiting faculty candidates, com-

piled PhD student feedback, and served as liaison to faculty search committee.

Member, Computer Science Student Advisory Committee 2013 – 2014 Met with visiting speakers and job candidates to the Williams computer science department and provided feedback on job candidates. Organized department meetings and social events. Elected by peers as one of two student representatives.

Peer Review

Reviewed papers and participated in committee discussions for the following venues:

- TOPLAS 2024	Reviewer
- SAS 2024	External Reviewer
- TOPLAS 2023	Reviewer
- Infer Workshop 2023	Program Committee
- OOPSLA 2023	Artifact Evaluation Committee
- OOPSLA 2023	External Review Committee
- SAS 2022	Program Committee
- OOPSLA 2022	Artifact Evaluation Committee
- OOPSLA 2022	External Review Committee
- CAV 2021	Sub-reviewer
- SAS 2019	Artifact Evaluation Committee
- POPL 2019	Sub-reviewer
- APLAS 2017	Sub-reviewer
- CAV 2017	Sub-reviewer
- SAS 2016	Sub-reviewer