

AFTAB HUSSAIN

PhD Student in Computer Science, University of Houston

+1-949-287-1675, aftab.hussain46@gmail.com

INTERESTS	Software engineering (Software testing), machine learning, big data analytics, security, systems		
SKILLS	Python, Tensorflow (Learning), C++, C, Java, SLURM, Docker, Linux		
EDUCATION	Ph.D. in Computer Science		2020 - present
	<i>University of Houston (UH)</i>		
	M.Sc. in Software Engineering		2015
	<i>University of California, Irvine (UCI)</i>		
	M.Sc. in Computer Science & Engineering		2012
EXPERIENCE	<i>Bangladesh University of Engineering and Technology (BUET)</i>		
	B.Tech. in Computer Science & Engineering		2009
	<i>Institute of Engineering and Management, Kolkata (IEM)</i>		
	Graduate Researcher, Teaching Assistant	UH	Jul '20 - present
	Graduate Researcher, Teaching Assistant	UCI	Sep '13 - Jun '20
PROJECTS	Research Associate	BUET	Dec '12 - Aug '13
	Research Assistant	BUET	Sep '10 - Jun '11
	Software Engineering Intern	Next Tel Comm., Dhaka	Mar '10 - Apr '10
	Analyzing Learning Behaviour of Code Intelligence Models		Apr '21 - present
	• Running/analyzing neural models on GPUs trained on massive code datasets for predicting coding tasks.		
AWARDS	Enhancing Fuzz Testing		Jul '20 - present
	• Developing test reduction techniques in Python for faster and more effective bug detection in parser/compiler libraries, image processors, and other software tools used in billions of devices.		
	LXDs: Linux Security Project	Publication: USENIX ATC 2019	Sep '17 - Apr '19
	• Co-designed an interface description lang. and developed its C++ compiler for isolating Linux modules.		
	Graspan: Big Code Analysis	Publication: ACM ASPLOS 2017	Jul '15 - Jul '17
LINKS	• Collaborated in building a scalable graph processing system in Java for analyzing millions of lines of code.		
	• Led codebase migration efforts to C++. Graspan found 85 bugs in Linux within a few hours.		
	Big Code Mining in Stack Overflow	Publication: ACM MSR 2016	Sep '13 - Feb '15
	• Extracted and compiled 300,000+ Stack Overflow Java snippets.		
	• Developed automated code repair techniques to improve their parse rate from 6.22% to 19.24%.		
LINKS	Homepage	https://aftabhussain.github.io/	
	LinkedIn	https://www.linkedin.com/in/hussainaftab/	
	Google Scholar	https://scholar.google.com/citations?user=fQlfnOMAAAAJ&hl=en	