

## Curriculum Vitae: Ifteher Alom

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PERSONAL INFORMATION	Doctoral Student, Research Assistant <a href="#">University of Kentucky</a>	<i>LinkedIn:</i> <a href="http://www.linkedin.com/in/ifteheralom">www.linkedin.com/in/ifteheralom</a> <i>E-mail:</i> <a href="mailto:ifteheralom@uky.edu">ifteheralom@uky.edu</a>
RESEARCH INTERESTS	<b>Network Security, Blockchain Applications, Self Sovereign Identity (SSI), Applied Cryptography and Zero Knowledge Proof (ZKP).</b>	
EDUCATION	<b>Ph.D. in Computer Science</b> <a href="#">University of Kentucky, Lexington, United States</a>	2023 to date
	Supervisor: <a href="#">Dr. Yang Xiao</a>	
	Research Focus: Explore SSI tools for enhancing security and privacy aspects in identification schemes, applications of Zero Knowledge protocols and Trusted Execution Environment (TEE).	
	<b>B.Sc in Computer Science and Engineering</b> <a href="#">Shahjalal University of Science and Technology, Sylhet, Bangladesh</a>	2016 to 2019
	Final Year Project: <a href="#">Performance measurement framework for private blockchain platforms</a>	
	Electives: Computer Security, Database Systems, Artificial Intelligence	
	Projects:	
	<ul style="list-style-type: none"><li>– Block explorer for private blockchain platform: Developed a middleware to fetch and present data from the blockchain using platform SDK for Hyperledger Fabric applications deployed on a local blockchain network using docker.</li><li>– Online course management system: Portal for teachers and students to manage class schedules, course registration, attendance, and results.</li><li>– Tutor finder mobile app and website: Android mobile app and website featuring area-based tutor search, profile management, and chat room.</li></ul>	
EMPLOYMENT HISTORY	<b>Software Engineer</b> <a href="#">Samsung R&amp;D Institute (SRBD), Dhaka, Bangladesh</a>	March, 2020 to July 2023
	Projects: OneUI Home, Samsung Messages, Backup and Restore	
	Responsibilities: Develop features according to requirements using new tools, libraries, APIs, and frameworks in <i>Android WearOS</i> and <i>Tizen</i> platforms. Communicate with key stakeholders located in different geographic locations. Research and propose ideas to improve user experience and stability of Samsung services. Explore new technologies that can help in the innovation and development of a smarter ecosystem.	
	<b>Research Assistant</b> <a href="#">Shahjalal University Blockchain and SSecurity Laboratory (SUBSEL), Sylhet, Bangladesh</a>	September, 2019 to February 2020
	Projects: Securing online university services	
	Responsibilities: Conducted research and development of a prototype for a unified authentication and authorization system for online university services (Federated Identity Management).	
	Tech Stack: SimpleSAMLphp, Zimbra Mail, Hyperledger Fabric, AWS EC2, Docker, Golang, Javascript, CentOS, Ubuntu.	
JOURNAL PUBLICATIONS	<a href="#">[1]</a> Alom, I., Ferdous, M.S. and Chowdhury, M.J.M. BlockMeter: An Application Agnostic Performance Measurement Framework For Private Blockchain Platforms. In: <i>IEEE Transactions on Services Computing</i> , 2023.	

CONFERENCE  
PUBLICATIONS

- [2] Alom, I., Eshita, R. M., Harun, A. I., Ferdous, M. S., Shuhan, M. K. B., Chowdhury, M. J. M. and Rahman, M. S. Dynamic Management of Identity Federations using Blockchain. In: *the 3rd IEEE Communications Society (ComSoc) sponsored conference on Blockchain and Cryptocurrency (ICBC)*. 2021.
- [3] Johnson, A. D., Alom, I., Xiao, Y. Rethinking Single Sign-On: A Reliable and Privacy-Preserving Alternative with Verifiable Credentials. In: *the Proceedings of the 10th ACM Workshop on Moving Target Defense (MTD '23 in conjunction with ACM CCS '23)*.

POSTERS

- [4] Alom, I. and Shatil, M. A. U. Performance Measurement Framework For Private Blockchain Platforms. In: *the 6th International Conference on Networking, Systems and Security (NSysS)*, 2019.

TECHNICAL  
SKILLS

- Programming Languages: Java, Python, C++, Golang, Javascript, PHP
- Blockchain Frameworks: Hyperledger Fabric, Ethereum, Bitcoin
- Web Technologies: Express, React, Angular, Django, Bootstrap, JSP
- Database Tools: MySQL, MongoDB, Firebase
- Mobile Development: Andoid, Tizen
- Version Control: Git, Perforce
- Operating Systems: Ubuntu, CentOs, Windows

AWARDS

- **Software Certification** by Samsung Electronics in recognition of professional programming skills.
- **SRBD Icon Employee** for delivering project goals and teamwork in Galaxy Watch 5 development.