

Bikash Thapa
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EDUCATION	<i>Doctor of Philosophy</i> , Computer Science Old Dominion University (Norfolk, VA)	Aug. 2025 - Present
	<i>Bachelor in Engineering</i> , Computer Engineering Pulchowk Campus, Tribhuvan University (Lalitpur, Nepal)	Nov. 2017 - Apr. 2022
HONORS AND AWARDS	<i>Best Undergraduate Project Award</i> , by Rara Labs Received a prize of NPR 40000(2022)	
	<i>First runner up</i> LogPoint CTF (2021)	
	<i>Hult Prize (2019)</i> Campus Finalist	
	<i>Full Scholarship</i> Bachelor of Engineering funded by the Government of Nepal (2017)	
WORK EXPERIENCE	<i>Graduate Research Assistant</i> Old Dominion University (Norfolk, VA), Department of Computer Science	Aug. 2025 - Present
	• Conduct research in areas of applied cryptography and data privacy including fully homomorphic encryption and trusted hardware.	
	<i>Graduate Teaching Assistant</i> Old Dominion University (Norfolk, VA), Department of Computer Science	Aug. 2025 - Present
	• Hold office hours, grade assignments, and evaluate examinations. • Courses include CS 462/562 (Cybersecurity Fundamentals).	
	<i>Solutions Engineer</i> LogPoint (Lalitpur, Nepal)	February 2022 - July 2025
	• Software Troubleshooting: Identified and addressed irregularities in the SIEM software. Debugged issues in a Production environment (Python, Java). Developed and deployed hotfixes when necessary. • Linux Administration: Debugged and resolved issues related to OS, System, Networking and Application. layers of SIEM in customer production environment. Worked on root cause analysis of issues related to system performance, and tuned production LogPoint environment. • SaaS Operations: Integrated open-source solutions like Prometheus and Grafana in monitoring pipeline of SaaS applications. • Internal Toolings Development: Automated server administration and monitoring by building internal tools using Bash and Python. Proved to be helpful for personal and departmental use.	
	<i>Blockchain Intern</i> Sireto Technology (Lalitpur, Nepal)	Aug. 2021 - Dec. 2021

	<ul style="list-style-type: none"> Created smart contracts in Haskell within the Plutus framework, specifically designed for the Cardano ecosystem. Enhanced software development capabilities by acquiring proficiency in new tools and techniques essential for project completion.
COURSEWORK AND SKILLS	<p><i>Computer Science:</i> Computer Networks and Security, Cryptography, Operating Systems, Cloud Computing, Computer Architecture/Organization, Advanced Algorithms, Data Structures and Algorithms, Database Management Systems, Theory of Computation</p> <p><i>Mathematics:</i> Discrete Mathematics, Linear Algebra, Calculus I-III, Differential Equations</p> <p><i>Languages and Tools:</i> C++, Python, JavaScript, Git, Linux, L^AT_EX, Docker, Databases-MongoDB, PostgreSQL</p>
DEVELOPMENT EXPERIENCE	<p><i>Bifrost, Server Monitoring Tool (2023)</i></p> <ul style="list-style-type: none"> Built a server monitoring and alerting setup web application using Grafana and Prometheus. Updated the database structure and implemented REST APIs for better performance. Python, MongoDB, Typescript, Docker, Nginx, Linux. <p><i>Digital Id Management System Using Blockchain Technology (2022)</i></p> <ul style="list-style-type: none"> Developed a Web3 application that employed Blockchain Technology to provide digital identity to users as opposed to a paper-based identity. Users could choose the information they prefer to keep private and the particular information they would like to share. Implementation allowed self-sovereign identity, which is inherently unalterable and more secure than traditional identity systems. Solidity, IPFS, Firestore, React, Web3. <p><i>Contact Tracing Application (2021)</i></p> <ul style="list-style-type: none"> Digitized the manual tracing system with aim in assisting the health officials trace the infected person suffering from communicable disease. Used Bluetooth technology to trace proximity in mobile devices, and alert the users when they are near to any other registered infected users. Firebase, Firestore, Flutter.
EXTRA-CURRICULAR ACTIVITIES	<p><i>Pulchowk Campus, Tribhuvan University (Lalitpur, Nepal)</i></p> <p>Event Organizer, AI and Data Science Competition, Locus (2022)</p>