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I. RESEARCH INTEREST

- Cyber Security: Threats and Vulnerabilities in Software
- Cyber Security Education.
- Data Mining and Data Analytics.
- Machine and Deep Learning.
- Diversity, Equity, Inclusion, A11y in STEM.

II. ACADEMIC EXPERIENCES

- Assistant Professor, Department of Computer Science, New Jersey City University. September 2020 – Present.
- Graduate Research Assistant, Department of Computer Science, Texas Tech University. August 2016 – August 2020.
- Graduate Teaching Assistant, Department of Computer Science, Texas Tech University. August 2016 – December 2018.

III. EDUCATION

PhD and MS	Computer Science	Texas Tech University, Lubbock, TX, USA	August 2020
Post Graduate Diploma in Business Administration	International Business	Symbiosis Centre for Distance Learning, Pune, India	August 2014
BS	Computer Science	West Bengal University of Technology, Kolkata, India	August 2008

IV. CERTIFICATIONS

- ESCALA's Culturally Responsive Teaching in STEM, Winter 2023.
- Oracle Certified Professional, Java SE 6 Programmer April 2011.
- Sybase ASE 15.0 SQL Developer Professional May 2010.

V. PUBLICATIONS

- H. N. Nguyen, F. Abri, V. Pham, **M. Chatterjee**, A. S. Namin and T. Dang, "MalView: Interactive Visual Analytics for Comprehending Malware Behavior," in *IEEE Access*, 2022, doi: 10.1109/ACCESS.2022.3207782.
- Datta, P., **Chatterjee, M.**, 2022, July. Finding Your Feet In Cybersecurity: A Reddit Text Mining Approach. In *2022 IEEE 46th Annual Computers, Software, and Applications Conference (COMPSAC)*. IEEE Computer Society.
- Patel, N., Cancel, D., **Chatterjee, M.** and Rahman, M.S., 2021, December. Covid-19 digital Contact-tracing: a doorway to well-being or a backdoor to security vulnerabilities?. In *2021 IEEE International Conference on Big Data (Big Data)* (pp. 4297-4302). IEEE.
- **Chatterjee, M.** and Namin, A.S., 2021. A fuzzy Dempster–Shafer classifier for detecting Web spams. *Journal of Information Security and Applications*, 59, p.102793.
- Nair, V., **Chatterjee, M.**, Tavakoli, N., Siami Namin, A. and Snoeyink, C., 2020. Fast Fourier Transformation for Optimizing Convolutional Neural Networks in Object Recognition. In *2020 19th IEEE International Conference On Machine Learning And Applications (ICMLA)*. IEEE.
- **Chatterjee, M.**, Datta, P., Abri, F., Namin, A.S. and Jones, K.S., 2020, July. Cloud: A Platform to Launch Stealth Attacks. In *2020 IEEE 44th Annual Computers, Software, and Applications Conference (COMPSAC)* (pp. 1558-1563). IEEE.
- **Chatterjee, M.**, Datta, P., Abri, F., Namin, A.S. and Jones, K.S., 2020, July. Abuse of the Cloud as an Attack Platform. In *2020 IEEE 44th Annual Computers, Software, and Applications Conference (COMPSAC)* (pp. 1091-1092). IEEE Computer Society.
- **Chatterjee, M.** and Namin, A.S., 2019, July. Detecting phishing websites through deep reinforcement learning. In *2019 IEEE 43rd Annual Computer Software and Applications Conference (COMPSAC)* (Vol. 2, pp. 227-232). IEEE.
- **Chatterjee, M.**, Namin, A.S. and Datta, P., 2018, December. Evidence fusion for malicious bot detection in IoT. In *2018 IEEE International Conference on Big Data (Big Data)* (pp. 4545-4548). IEEE.
- Datta, P., Namin, A.S. and **Chatterjee, M.**, 2018, December. A survey of privacy concerns in wearable devices. In *2018 IEEE International Conference on Big Data (Big Data)* (pp. 4549-4553). IEEE.
- **Chatterjee, M.** and Namin, A.S., 2018, July. Detecting web spams using evidence theory. In *2018 IEEE 42nd annual computer software and applications conference (COMPSAC)* (Vol. 2, pp. 695-700). IEEE.

VI. UNDERGRADUATE RESEARCH

- Council on Undergraduate Research's (CUR) Advocacy Program- 2022-23 Scholars Transforming Through Research (STR): [CUR Releases 2022 STR Program Participants | General News - News | Council on Undergraduate Research](#)
 - i. Abderrahman Wahni.
 - ii. Shouhaybou Mbow.
- STEM SUMMER RESEARCH INTERNSHIP, 2023.

Topics: Federated Machine Learning for User Data and Privacy Preservation.

Interns:

- i. Stephanie Abanilla
- ii. Alexander Alvarez.
- iii. Hamad Soheim.
- STEM SUMMER RESEARCH INTERNSHIP, 2022.

Topics: Privacy and Security concerns in Metaverse, NFT and Drones.

Interns:

- i. Tuhfa Maisara.
 - ii. Sara Pagan.
 - iii. Abderrahman Wahni.
 - STEM SUMMER RESEARCH INTERNSHIP, 2021.
- Title: *Security and Usability Analysis of Android Covid19 Contact Tracing Apps*.
 Manuscript published in First International Workshop on Data science for equality, inclusion and well-being challenges, December 2021 (co-located with IEEE BigData 2021).

Interns:

- i. Nishit Patel
- ii. David Cancel

VII. FACULTY ADVISOR

- Girls Who Code New Jersey City University College Loop
- New Jersey City University Software Development Club.

VIII. INVITED TALK

- NJCU's partner STEKOM University, Indonesia.
 - Topic: *All Things about Cyber Security and Internet Safety*.

IX. GRANTS INTERNAL TO NJCU:

- Provost Office Mini-Grant Professional Development Funds, AY 2021-22.
- Provost Office Mini-Grant Professional Development Funds, AY 2020-21.
- Dean's Office Professional Development Funds, AY 2020-21.

X. TEACHING

Assistant Professor, New Jersey City University

Semester	Course	Level
Fall 2020	Computer Science I	101
	Discrete Structures I	202-1 and 202-2
	Programming Languages	302

Spring 2021	Computer Science I	101-1 and 101-2
	Discrete Structures I	202-1 and 202-2
	Introduction to Cryptography	408-1
Fall 2021	Computer Science I	101-1
	Discrete Structures I	202-1
	Data Structure	209-2 and 209-3
	Artificial Intelligence	404-1
Spring 2022	Computer Science II	CS 101
	Data Structure	CS 209
	Artificial Intelligence	CS 404
	Introduction to Cryptography	CS 408
Summer 2022	Artificial Intelligence	CS 404
Fall 2022	Computer Science I	101-1 and 101-3
	Data Structure	209-1
	Introduction to Linux/Unix	407
Spring 2023	Computer Science I	102-1 and 102-2
	Data Structure	CS 209
	Introduction to Cryptography	CS 408

Teaching Assistant, Texas Tech University

Semester	Course	Level
Fall 2016	Software Engineering I	Undergraduate
Spring 2017	Advanced Algorithms	Graduate
Summer I 2017	Computer Science II (C programming)	Undergraduate
Summer II 2017	Data Structures	Undergraduate
Fall 2017	Computer Science I (Python programming)	Undergraduate
Spring 2018	Software Architecture	Graduate
Summer I 2018	Computer Science I (Python programming)	Undergraduate
Summer II 2018	Computer Science II (C programming)	Undergraduate
Fall 2018	Computer Science II (C programming)	Undergraduate

XI. CO-OP SUPERVISION

- Summer 2023.
Title: Keystroke spy: a Python based keylogger.
Student: Gabriel Mendoza.
- Spring 2023.
Title: *Classification of re-packaged Android malware*
Students:
 - i. Kirolos Twafeek
 - ii. Shouhaybou Mbow
- Fall 2022.

Title: *Insincere Reddit comments classification*

Student:

- i. Michael Lavell
- Fall 2020.

Title: *Cyber Attack trend analysis during Covid-19 pandemic.*

Students:

- ii. Faheed Adenuga
- iii. Christian Lozano.

XII. INDEPENDENT STUDY:

Term: Summer 2021

Student: Michael Onyeije

Topic: Discrete Structure II (CS 203).

XIII. MENTORING AND ADVISING

- PhD Dissertation Co-advisor:
Student: Bokolo, Biodoumoye.
Institution: Department of Computer Science, Sam Houston State University.
Dissertation Topic: Mobile Digital and Cyber Forensics.
- AnitaB.org 2022 Q4 1:1 Mentor.
 - Mentee: Juliet Orr
- Faculty Mentor: *OnPace* Mentoring Program.
2022-23 Students:
 - i. Brian Lucero
 - ii. Chimelogo (George) Igbokwe
 - iii. Justin pun
 2021 Students:
 - i. Kirolos Taweek
 - ii. Anthony Andagana
 - iii. Emmanuel Akinleye
 - iv. Brian Lucero

XIV. MEDIA

- *Boffins find that over nine out of ten 'ethical' hackers are being a bit naughty when it comes to cloud services.* By Thomas Claburn.
https://www.theregister.com/2020/06/17/cloud_services_hacking/
- *Even Ethical Hackers Abuse Cloud Services.* By Akshaya Asokan.
<https://www.databreachtoday.com/even-ethical-hackers-abuse-cloud-services-a-14469>
- *How and Why Hackers Use the Cloud to Launch Stealth Attacks.* By Amanda Bowman.
<https://today.ttu.edu/posts/2020/07/Stories/hackers-use-cloud-to-launch-attacks>

XV. INSTITUTIONAL ACTIVITIES

- MS in CS Program Development at New Jersey City University
 - i. Working team and Advanced level Course Developer.
- Course Proposals
 - i. CS TBD-9: Introduction to Social Web Theories and Applications.
 - ii. CS TBD-6: Secure Software Engineering
 - iii. CS TBD-19: Software Privacy and Security.
 - iv. CS TBD-18: Introduction to Deep Learning and Applications.
- NJCU CS Department Senate Representative.
- NJCU CS Department Social Media Advocate.
- NJCU Senate member for Committee of Instructional Technology.
- NJCU CAS C&I Committee 2022-2023.
- Texas Tech University ABET Accreditation Review Process, 2017-2018.

XVI. PROFESSIONAL ACTIVITIES

- Workshop Organizer
 - i. The 1st IEEE International Workshop on Integrating Diversity, Equity, and Inclusion in Cybersecurity Research (IDEI-CR 2022).
[IDEI-CR 2022 – COMPSAC 2022 \(computer.org\)](https://ieeecompsac.computer.org/2022/idei-cr)
 - ii. The 1st IEEE International Workshop on Data Science & Machine Learning for Cybersecurity, IoT & Digital Forensics.
<https://ieeecompsac.computer.org/2023/dsml-workshop/>
- Program Committee Member
 - i. COMPSAC 2021 (IEEE Signature Conference on Computers, Software, and Applications).
 - ii. BigData'20 BigEACPS-2020.
- Reviewer Role:
 - i. Forensic Science International: Digital Investigation.
 - ii. International Journal of Applied Sciences.
 - iii. NSF CISE REU.
 - iv. IEEE Access.
 - v. NASA Research and Education Support Services (NRESS).

XVII. OUTREACH

- Mentor at Women in STEM.
- Mentor at Big Brothers Big Sisters of Essex, Hudson, and Union Counties.
- Promoting CS education to High school students at Explore Engineering Summer Camp, Texas Tech University. Lubbock, TX. June 2019.

- Workshop on Digital Forensics A 3-day workshop organized and presented by the faculties of Texas Tech University and Sandia National Laboratories. May 2018, Lubbock, TX.
- Tutoring under privileged students through the social initiative Outreach program by Cognizant Technology Solutions, Kolkata, India. August 2011- December 2011.

XVIII. AWARDS

- The Women in CyberSecurity (WiCyS) faculty scholarship, 2023.
- Grace Hopper Celebration (GHC) Faculty Scholarship, 2022.
- NJCU Inclusive Teaching Faculty Fellowship, AY 2021-2022.
- CRA-W Grad Cohort for Women, 2018.
- Applause from Cognizant Technology Solutions BFS vertical, 2015.

XIX. PROFESSIONAL COMMUNITY ENGAGEMENTS

- Women in CyberSecurity (WiCyS)
- Academic Impressions
- Quality Matters
- Blackboard | Anthology
- Kahoot!
- Course Hero
- HireEd

XX. CORPORATE EXPERIENCE

Organization	Position	Timeline	Location
CogDev Malaysia Sdn. Bhd.	Systems Analyst	August 2015 – August 2016	Kuala Lumpur, Malaysia
Cognizant Technology Solutions Pvt Ltd	Associate	Feb 2009 - August 2015	Kolkata, India

XXI. REFERENCES

- Dr. John Grew, jgrew@njcu.edu
- Dr. Jyhcheng Liu, tliu@njcu.edu
- Dr. Scott Mittman, smittman@njcu.edu