Bhupendra Acharya
Curriculum Vitae

Saarbrucken, Germany (Temporary)
New Orleans, LA, USA (Permanent)
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✉ *bhupendra.acharya@cispa.de (work)*
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Research Interests

Internet Cybercrime; Large Scale Internet Measurement; Phishing; Abuse; Scams. Web and Network Security

Education

Jan 2018 – Dec 2023
Doctoral in Engineering and Applied Sciences
Department of Computer Science, University of New Orleans
Thesis: Analyzing the Robustness of Social Engineering Attacks on Defense Systems

Jan 2018 – Dec 2020
MS in Computer Science (Cyber Security)
Department of Computer Science, University of New Orleans
Thesis: PhishPrint: A Novel Framework for Scalable Evaluation of Web Security Crawlers and Mining of Unknown Cloaking Vectors

Jan 2007 – Dec 2010
BS in Computer Science
Department of Computer Science, Cameron University

Academic Experience

Mar 2023 – Present
Postdoctoral Researcher, CISPA Helmholtz Center for Information Security, Germany.
Advisor: Dr. Thorsten Holz

Jan 2018 – Dec 2022
Teaching / Research Assistant (PhD Student), University of New Orleans, LA, US.
Advisor: Dr. Phani Vadrevu

Industrial Experience

2021 - 2022
2013 - 2018
Software Development Engineer in Test, Payments and Devices. Amazon Inc.
Seattle, WA and Sunnyvale, CA, US.

2012 - 2013
Software Development Engineer in Web and Test. Raima Inc.
Seattle, WA, US.

2011 - 2012
Software Development Engineer. Microsoft Inc (Contracting via PeopleTech Group).
Redmond, WA, US.

Honors and Awards

2022	**Innovative and Think Big**, HackaFire Amazon Fire TV and Devices Awards
2021	**Offensive Attack**, Google Vulnerability Rewards (Twice)
2021-2022	**Conference Grants,** USENIX Registration (2021), DIMVA Travel (2022)
2007-2010	**List of Honors,** Cameron University Dean's List

Publications (Peer-reviewed, Conferences)

[1] Mario Beluri, **_Bhupendra Acharya_**, Soheil Khodayari, Giada Stivala, Giancarlo Pellegrino, Thorsten Holz. **_Exploration of the Dynamics of Buy and Sale of Social Media Accounts_**. In the 25th Proceedings of the ACM Internet Measurement Conference (IMC), 2025.
Acceptance Rate: TBD

[2] **_Bhupendra Acharya_**, Dario Lazzaro, Antonio Emanuele Cinà, Thorsten Holz. **_Pirates of Charity: Exploring Donation-based Abuses in Social Media Platforms._** In Proceedings of the ACM World Wide Web Conference (WWW), 2025.
Acceptance Rate: 404/2062 (19.83%)

[3] Christian Böttger, Nurullah Demir, Jan Hörnemann, **_Bhupendra Acharya_**, Norbert Pohlmann, Thorsten Holz, Matteo Grosse-Kampmann, Tobias Urban. **_Understanding Regional Filter Lists: Efficacy and Impact._** In Proceedings of 25th Privacy Enhancing Technologies Symposium (PETS), 2025.
Acceptance Rate: 44/146 (30.13%)

[4] **_Bhupendra Acharya_**, Dario Lazzaro, Efren Lopez Morales, Adam Oest, Muhammad Saad, Antonio Emanuele Cinà, Lea Schönherr, Thorsten Holz. **_The Imitation Game: Exploring Brand Impersonation Attacks on Social Media Platforms._** In Proceedings of the 33rd USENIX Security Symposium (USENIX Security), 2024.
Acceptance Rate: 382/2176 (17.6%)

[5] **_Bhupendra Acharya,_** Muhammad Saad, Antonio Emanuele Cinà, Lea Schönherr, Hoang Dai Nguyen, Adam Oest, Phani Vadrevu, Thorsten Holz. **_Conning the Crypto Conman: End-to-End Analysis of Cryptocurrency Technical Support Scams._** In Proceedings of the 45th IEEE Symposium on Security and Privacy (IEEE S&P), 2024.
Acceptance Rate: 100/582 (17.18%)

[6] Hoang Dai Nguyen, Karthika Subramani, **_Bhupendra Acharya_**, Roberto Perdisci, Phani Vadrevu. **_C-FRAME: Characterizing and Measuring in-the-wild CAPTCHA Attacks._** In Proceedings of the 45th IEEE Symposium on Security and Privacy (IEEE S&P), 2024.
Acceptance Rate: 70/601 (11.64%)

[7] **_Bhupendra Acharya,_** Phani Vadrevu. **_A Human in Every APE: Delineating and Evaluating the Human Analysis Systems of Anti-Phishing Entities._** In Proceedings of the 19th Conference on Detection of Intrusions and Malware & Vulnerability Assessment (DIMVA), 2022.
Acceptance Rate: 11/39 (28.2%)

[8] **_Bhupendra Acharya,_** Phani Vadrevu. **_PhishPrint: Evading Phishing Detection Crawlers by Prior Profiling_**. In Proceedings of the 30th USENIX Security Symposium (USENIX Security), 2021.
Acceptance Rate: 246/1316 (18.7%)

Publications (Pre-print, arXiv)

[9] **_Bhupendra Acharya_****, Dominik Sautter**, Muhammad Saad, Thorsten Holz. **_ScamChatBot: An End-to-End Analysis of Fake Account Recovery on Social Media via Chatbots_**
** Both authors equally contributed
Under submission, **_Available Pre-print_** at arXiv (arXiv:2412.15072)

[10] **_Bhupendra Acharya_**, Thorsten Holz. **_An Explorative Study of Pig Butchering Scams_**.
Under submission, **_Available Pre-print_** at arXiv (arXiv:2412.15423)

Research (In the pipeline to submissions)

[11] Exploration of Forms Abuse [Target NDSS, April 2025]
[12] Analysis of Sensitive Content Share in Social Media Platforms [Target NDSS, April 2025]

Academic Service

2024 Reviewer, ACM International World Wide Web (WWW) Conference
Program Committee, USENIX Security
Conference Program Session Chair, ACM CCS
Artifact Evaluation Committee, USENIX Security
2023 Artifact Evaluation Committee, ACM CCS
Artifact Evaluation Committee, USENIX Security

Teaching

CS 2467 Systems Programming and Concept, Instructor, University of New Orleans, LA, US
2021: Spring and Summer Semesters
2020: Spring, Summer, and Fall Semesters

CS 2450 Machine Language and Assembly, Instructor, University of New Orleans, LA, US
2021: Fall Semester

Advising Students (Thesis/Research Projects)

Current Graduate Students

2024 – Present   **Abdullah Alfurjani**, Saarland University, Germany, Thesis Research
2024 – Present   **Amala Augustine**, Saarland University, Germany, Thesis Research
2024 – Present   **Lie Sue Chung**, Saarland University, Germany, Thesis Research
2024 – Present   **Sagar Kishore**, Saarland University, Germany, Thesis Research
2024 – Present   **Marjo Toska** Saarland University, Germany, Thesis Research
2024 – Present   **Nilaa Maharjhan,** Saarland University, Germany, Thesis Research

Current Undergraduate Students

2024 – Present   **Jan-Julius Kallenborn**, Saarland University, Saarbrucken, Germany, Thesis Research
2024 – Present   **Tim Christmann**, Saarland University, Saarbrucken, Germany, Cybersecurity Projects
2024 – Present   **Ady Elouej**, Saarland University, Saarbrucken, Germany, Thesis Research
2024 – Present   **Louai Alkhatib**, Saarland University, Saarbrucken, Germany, Thesis Research
2024 – Present   **Khalil Hassan**, Saarland University, Saarbrucken, Germany, Thesis Research

Alumni Students

2024   **Christoph Petersen****, Ruhr University, Germany, Undergraduate Thesis
Thesis: Cyber Thieves on Telegram: Investigating Stolen Data and Fraud Patterns in Messenger-based C2 Channels
2024   **Mario Beluri****, Saarland University, Germany, Graduate Thesis
Thesis: Exploration of the Dynamics of Buy and Sale of Social Media Accounts
2024   **Andreas Brix**, Saarland University, Germany, Cybersecurity Projects
2023/2024   **Laura Thineta Maulia****, Saarland University, Germany, Undergraduate Thesis
Thesis: Ghost Coins: Analyzing the Prevalence of Fake Cryptocurrency Wallet
2023/2024   **Dominik Sautter****, Saarland University, Germany, Graduate Thesis
Thesis: ScamChatBot: An End-to-End Analysis of Fake Account Recovery on Social Media via Chatbots

** Alumni students successfully completed their thesis work whom I had the privilege of advising.

Media Coverage

[1] Felix Koltermann. *Seeking help for crypto wallet problems on social media can attract scammers.* https://idw-online.de/de/news839794. 2024

[2] Redazione. *Crypto scams on X, asking for help on social for problems with one's wallet attracts scammers, HoneyTweet study.* https://decripto.org/en/crypto-scams-on-x-asking-for-help-on-social-for-problems-with-ones-wallet-attracts-scammers-honeytweet-study/. 2024

Invited Research Talks (Selected)

Dec 2024   **Title: Protecting Users and Brands Against Social Engineering Attacks**
Massachusetts Institute of Technology, Sloan (CAMS), MA

Sep 2024   **Title: Empirical Study of Scams and Abuses in Social Media Platforms**
Boston University, Boston, MA

Sep 2024   **Title: Identifying Emerging Scams and Phishing Attacks via AI-Powered Automated Engagement**
Symposium on Electronic Crime Research (e-Crime 2024), Boston, MA

Apr 2024   **Title: Empirical Study on Web Attacks and Abuses**
Texas A&M, Kingsville, Texas

Feb 2024   **Title: Cloak and Scam: Creating Honeypots to Measure Present-Day Internet Defense Mechanisms**
University of New Mexico, New Mexico, NM

Nov 2023   **Title: How Safe Is the Web? Analyzing the Robustness of Prevalent Social Engineering Defenses**
Tulane University, New Orleans, LA

Jan 2023   **Title: Analyzing the Robustness of Prevalent Social Engineering Defense Mechanisms**
California State LA, Los Angeles, CA

Writing (Grant Proposal/Book)

Grant Proposal.   **Title: Enhancing Web Measurement Robustness In the Cases of Social Media Abuses and Web Tracking**
Grant Family: Deutsche Forschungsgemeinschaft (DFG), German Research Fund
PI 1: Tobias Urban, Professor
        Westphalian University of Applied Sciences, Germany
PI 2: Bhupendra Acharya, Postdoctoral Researcher
        CISPA Helmholtz for Information Security, Germany
Amount Requested: €950,000
Status: Pending
Submitted: Sep 02, 2024
Expected Result by: Feb/Mar 2025

Book Write.   I am currently in the early phase of writing a book - **"Advanced Web Security"** (Target: Aug 2026)