

# Tamoghna Dey

Kolkata, India | +91-8274854617 |

Email | LinkedIn | Github

## About me

---

Protocol researcher specializing in secure, scalable DeFi and blockchain systems. Experienced in designing protocol architectures, conducting deep technical research, and collaborating with founders and engineering teams to translate conceptual designs into production-ready, secure solutions. Skilled at bridging technical depth with business strategy, from smart contract audits to investor-facing technical narratives.

## Experience

---

### Web3 security researcher @ BLOK Capital

Feb 2025 - Present

- Designed and evaluated secure, scalable architectures for new protocol features, balancing innovation with operational feasibility.
- Collaborated directly with the founder to define product requirements, perform deep technical research, and create system designs for implementation by smart contract teams and review code.
- Maintained and authored comprehensive protocol documentation, ensuring clarity for both technical and non-technical stakeholders.
- Contributed to fundraising efforts by creating and refining pitch decks, translating complex technical concepts into compelling narratives for investors.

### Independent web3 security researcher

Portfolio

- Audited codebases for vulnerabilities across 10+ contests, across various contest platforms. Identified and reported 1 high, 1 medium, and 4 low-severity vulnerabilities.

## Skills

---

1. **Protocol Research & Architecture:** DeFi mechanism design, feature feasibility studies, protocol upgrade strategies
2. **Research and technical writing:** Skilled in conducting in-depth research on blockchain and web3 topics, and experienced in publishing academic papers and blogs on decentralized systems, smart contract security, and emerging technologies.
3. **Cryptographic concepts:** Understanding of cryptographic algorithms and principles applied in blockchain. Including SHA-256, ECDSA, RSA and asymmetric cryptography.
4. **Frameworks:** Foundry, Hardhat
5. **Javascript, Solidity, Python, LaTeX:** Proficient in multiple programming languages.

## Education

---

IIT Bhubaneswar, India B.Tech in Electrical and Electronics Engineering

Aug 2021 – May 2025

- CGPA: 7.13/10.0

## Publications

---

### Smart Contract: Tools and Challenges

[Link](#)

Debani Prasad Mishra, Shruti Senapati, *Tamoghna Dey*, Rakesh Kumar Lenka

### Reentrancy Vulnerability in the Blockchain Ecosystem: Historical Attacks, Detection Approaches, and Mitigation Strategies

[Link](#)

*Tamoghna Dey*, Rakesh Kumar Lenka, Shruti Senapati, Debani Prasad Mishra, Soubhagya Ranjan Mallick