

# Sulyab Thottungal Valapu

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in [sulyab](#)

github [sulyabtv](#)

globe <https://sulyabtv.github.io/>

## Research Interests

• Computer Networking • Blockchain • Mechanism Design • Internet of Things

## Experience


- 2021 – ◇ **University of Southern California** | Graduate Teaching Assistant
- Teaching Assistant for *Fundamentals of Computation* (Spring '21), *Intro to Algorithms and Theory of Computing* (Fall '21), and *Intro to Computer and Network Security* (Spring '22)
- 2018 – 2020 ◇ **Arista Networks** | Software Engineer
- Developed Network Layer software for Arista EOS®
  - Involved in all stages of software development process including design, development, deployment, debugging and maintenance

## Education

- 2021 – ◇ **Ph.D., University of Southern California** Computer Science
- Advised by Prof. Bhaskar Krishnamachari
  - Member of Autonomous Networks Research Group
  - CGPA: 3.94 / 4.0
- 2014 – 2018 ◇ **B.Tech. Information Technology, IIIT Allahabad**, Graduated with Honors.
- CGPA: 9.37 / 10

## Publications

### Conference Proceedings

- 1 **S. Thottungal Valapu**, T. Sarkar, J. Coleman, *et al.*, “DARSAN: A Decentralized Review System Suitable for NFT Marketplaces,” arXiv:2307.15768 [cs], arXiv, Jul. 2023.  DOI: 10.48550/arXiv.2307.15768.

### Technical Reports

- 1 **S. Thottungal Valapu** and B. Krishnamachari, “A Survey of Probabilistic Micropayment Schemes,” IEEE Blockchain Technical Briefs, Tech. Rep., Mar. 2022.

## Skills

- Languages ◇ Proficient: Python • C • C++  
Used: WebAssembly • Rust • Java • MATLAB
- Tools / Technologies ◇ Tendermint • GDB • Git • Wireshark

## Miscellaneous Experience

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### Internships

- 2017/05 - 2017/07    ◇ **Yonsei University, South Korea**
- Designed and implemented a blockchain-based protocol for intelligent autonomous vehicles to exchange messages and purchase services.
  - Analyzed the concept of blockchain branching to tackle scaling limitations

### Awards and Achievements

- 2017    ◇ Dean's Merit List, IIIT Allahabad

### Activities

- 2017    ◇ Core Team member of Hack In The North, the largest student-led hackathon in India
- 2022, 2023    ◇ Research Coach for the Viterbi Summer Institute program, an initiative by USC Viterbi School of Engineering to provide incoming freshmen with introductory research experience.

### Selected Coursework

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|------------|--|
| Systems    | ◇ Advanced Computer Networking<br>Autonomous Cyber-Physical Systems<br>Applied Cryptography<br>Network Security<br>Operating Systems |
| Algorithms | ◇ Advanced Analysis of Algorithms  |
| AI         | ◇ Cognitive Science<br>Natural Language Processing<br>Artificial Intelligence  |