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Singapore

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in Aashish Kolluri

Google Scholar

Aashish Kolluri

Education

- 2018–2023* **PhD**, *National University Of Singapore*, Singapore, with Prateek Saxena
- 2017 **BTech.**, *Indian Institute of Technology Kanpur*, India
- 2013 **Senior Secondary(12th)**, *Sri Chaitanya Narayana*, Hyderabad, India
- 2011 **Secondary(10th)**, *Narayana Olympiad School*, Hyderabad, India

Key Research Interests/Topics

Machine Learning over Graphs, Federated Learning, Differential Privacy, Program Synthesis & Debugging.

Publications

Preprints

- 2023 [Aashish Kolluri](#), Sarthak Choudhary, Bryan Hooi, Prateek Saxena, *RETEXO: Scalable Neural Network Training over Distributed Graphs* : **Under Review** arXiv:2302.13053
- 2022 [Aashish Kolluri](#), Kareem Shehata, Prateek Saxena, *An Empirical Snapshot of Differential Privacy in Graph Analysis Applications*: **Under Review**

Published

- 2023 Bo Wang, [Aashish Kolluri](#), Ivica Nikolic, Teodora Baluta, Prateek Saxena, *User-Customizable Transpilation for Scripting Languages*: **OOPSLA'23**
- 2022 [Aashish Kolluri](#), Teodora Baluta, Bryan Hooi, Prateek Saxena, *LPGNet: Link Private Graph Networks for Node Classification*: **CCS'22**(21.8% acc.rate)
- 2021 [Aashish Kolluri](#), Teodora Baluta, Prateek Saxena, *Private Hierarchical Clustering for Federated Networks*: **CCS'21**(approx 18% acc.rate)
- 2021 Bo Wang, Teodora Baluta, [Aashish Kolluri](#), Prateek Saxena, *SYNGUAR: Guaranteeing Generalization in Programming by Examples*: **ESEC/FSE'21**(24.5% acc.rate)
- 2021, Shiqi Shen, [Aashish Kolluri](#), Zhen Dong, Prateek Saxena, Abhik Roychoudhury, *Localizing Vulnerabilities Statistically From One Exploit*: **AsiaCCS'21**(18.4% acc.rate)
- Best-Paper** 2019 [Aashish Kolluri](#), Ivica Nikolic, Ilya Sergey, Aquinas Hobor, Prateek Saxena, *Exploiting the laws of order in smart contracts*: **ISSTA'19** (slides|artifact) (20.4% acc.rate)
- 2018 Ivica Nikolic, [Aashish Kolluri](#), Ilya Sergey, Prateek Saxena, Aquinas Hobor, *Finding The Greedy, Prodigal, and Suicidal Contracts at Scale*: **ACSAC'18** (slides|artifact)(20.1%)
- 2018 Sourav Das, [Aashish Kolluri](#), Prateek Saxena, Haifeng Yu (alphabetical order of last name), *Invited Paper - on the Security of Blockchain Consensus Protocols*: **ICISS'18**

Technical skills

Advanced Python, PyTorch
Intermediate C/C++, TensorFlow, KLEE, Z3, Solidity
Basic Any online resource/library

Teaching

Spring 2019 **Introduction to Computer Security, CS 3235**
Fall 2019 **Systems Security, CS 5231**

Conference/Journal Reviewer

2022 **Transactions on Dependable and Secure Computing, TSDC'22**
2021 **International Symposium on Information Theory, ISIT'21**
Sub-Review **USENIX'21, CCS'21**

Achievements

2021 **Best paper award, AsiaCCS'21**
2018–2022 **Research Scholar Fellowship, National University Of Singapore**
2011–2013 **Scholastic**

- **ALL INDIA RANK 286 (99.998 percentile) in JEE-Advanced 1,300,000 candidates**
- **K.V.P.Y(Kishore Vaigyanik Protsahan Yojana) scholarship, 175th among 150,000 candidates**

Talks & Panels

Nov 2022 **LPGNet: Link Private Networks for Node Classification, Google**, Invited-Internal Talk
July 2021 **LPGNet: Link Private Networks for Node Classification, ETH Zurich**, Invited Talk
July 2021 **Private Hierarchical Clustering in Federated Networks, Brave Research**, Invited Talk
August 2019 **Panel - Industry/Academics after PhD: prospects and challenges, @ NUS**, Moderator
August 2019 **Exploiting the Laws of Order in Smart Contracts, @ Resarch Week, NUS**, Invited talk
June 2018 **Blockchain Fundamentals - Smart Contract Security, @ Zilliqa**, Invited talk
May 2018 **Smart Contract Security: Hacking 34,200 Smart Contracts, @ Paypal Innovation Labs, Singapore**, Invited talk

Industry Experience

May–July '20 **Aqilliz, Edison Lim**
Design of the privacy platform in Aqilliz
May–July '16 **Flipkart Internet Pvt. Ltd., Vijayant Singh**
Project JIRO-Anomaly Detection for Flipkart Cloud's Alerting Service

References

Prateek Saxena Associate Professor, National University of Singapore, prateeks@comp.nus.edu.sg
Bryan Hooi Assistant Professor, National University of Singapore, bhooi@comp.nus.edu.sg
Abhik Roy-choudhury Provost's Chair Professor, National University of Singapore, abhik@comp.nus.edu.sg