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Aashish Kolluri

Education

2018- PhD, National University Of Singapore, Singapore, with Prateek Saxena.

Ongoing

- 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.

Research Interests

Differentially private analytics on federated networks and redesigning personalization for the privacy-aware users. I also have experience in Blockchains, Program Synthesis and Software Debugging.

Publications

- 2021 <u>Aashish Kolluri</u>, Teodora Baluta, Prateek Saxena, *Private Hierarchical Clustering for Federated Networks*: **To appear in CCS'21**
- 2021 Bo Wang, Teodora Baluta, <u>Aashish Kolluri</u>, Prateek Saxena, *SYNGUAR: Guaranteeing Generalization in Programming by Examples*:**To appear, FSE'21**(24.5% acc.rate)
- 2021 Shiqi Shen, <u>Aashish Kolluri</u>, Zhen Dong, Prateek Saxena, Abhik Roychoudhury, <u>Localizing Vulnerabilities Statistically From One Exploit</u>: **AsiaCCS'21**(18.4% acc.rate), **Best-paper award**
- 2019 <u>Aashish Kolluri</u>, 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, <u>Aashish Kolluri</u>, Ilya Sergey, Prateek Saxena, Aquinas Hobor, *Finding The Greedy, Prodigal, and Suicidal Contracts at Scale*: **ACSAC'18** (slides|artifact)(20.1%)
- 2018 Sourav Das, <u>Aashish Kolluri</u>, Prateek Saxena, Haifeng Yu (alphabetical order of last name), Invited Paper - on the Security of Blockchain Consensus Protocols: ICISS'18

Teaching

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

Program committee

2021 International Symposium on Information Theory, *ISIT'21*.

Achievements

- 2021 Best paper award, AsiaCCS'21.
- 2018–2022 Research Scholar Fellowship, National University Of Singapore.
- 2011–2013 **Scholastic**.
 - Achieved ALL INDIA RANK 286 (99.998 percentile) in JEE-Advanced 1,300,000 candidates.
 - Awarded the K.V.P.Y(Kishore Vaigyanik Protsahan Yojana) scholarship, 175th rank among 150,000 candidates.
 - Secured 146 rank (99.95 percentile) in EAMCET.
 - Secured First Rank district level in S.L.S.T.S.E

Talks & Panels

- July 2021 **Private Hierarchical Clustering in Federated Networks**, *Brave Research Team*, Invited Talk.
- August 2019 Panel Industry/Academics after PhD: prospects and challenges, @ Resarch Week, NUS, Moderator.
- August 2019 Exploiting the Laws of Order in Smart Contracts, @ Resarch Week, NUS, Invited talk.
 - July 2019 Exploiting the Laws of Order in Smart Contracts, @ ISSTA'19, Conference talk.
 - Dec 2018 Finding the Greedy, Prodigal and Suicidal Contracts, @ ACSAC'18, Conference 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 Aqilliz, Edison Lim.

2020—July Design of the privacy platform in Aqilliz 2020

- Designed their differentially private recommender system platform.
- Employed local differential private techniques to do social recommendation.
- Tested the private techniques on synthetic and real world datasets for utility loss.

May Flipkart Internet Pvt. Ltd., Vijayant Singh.

2016—July $\,$ Project JIRO-Anomaly Detection for Flipkart Cloud's Alerting Service $\,$ 2016

- Finding better algorithms for Anomaly Detection while reducing False Positives.
- o Developed an engine which compares existing algorithms. Find the presentation here.

Technical skills

Advanced Python, Geth (Ethereum), Z3, KLEE

 $In termediate \quad C, \ C++, \ Py Torch, \ Tensor Flow, \ My SQL, \ Php, \ GNUPlot, \ R, \ Solidity, \ Z3, \ SkLearn, \ Latex$

Basic Any online resource/library

References

Prateek Associate Professor, National University of Singapore, prateeks@comp.nus.edu.sg Saxena

Abhik Roy- Provost's Chair Professor, National University of Singapore, abhik@comp.nus.edu.sg choudhury