CURRICULUM VITAE

Bargav Jayaraman

PhD Student in Computer Science University of Virginia 330 Rice Hall, Charlottesville VA 22903

(a) Education & Training

University of Virginia Charlottesville VA, USA Computer Science PhD, 2016 – present IIIT Hyderabad Telangana, India Computer Science MS, 2012 – 2015 SASTRA University Tamil Nadu, India Computer Science B. Tech, 2008 – 2012

Email: bargavj@virginia.edu

Web: http://bargavjayaraman.github.io/

(b) Research & Professional Experience

Summer 2021 Research Intern, Microsoft Redmond Lab

2016 – present Graduate Research Assistant, University of Virginia

2015 – 2016 R & D Senior Analyst, Accenture Technology Labs Bangalore

Fall 2014 Teaching Assistant (Data Warehousing and Data Mining), IIIT Hyderabad Spring 2014 Teaching Assistant (Principles of Information Security), IIIT Hyderabad

(c) Publications

On Privacy-Preserving Machine Learning

- 1. Bargav Jayaraman, Lingxiao Wang, Katherine Knipmeyer, Quanquan Gu, and David Evans. Revisiting membership inference under realistic assumptions. *arXiv*:2005.10881, 2020.
- 2. Lingxiao Wang, Bargav Jayaraman, David Evans, and Quanquan Gu. Efficient privacy-preserving stochastic nonconvex optimization. *arXiv:1910.13659*, 2020.
- 3. Bargav Jayaraman and David Evans. Evaluating differentially private machine learning in practice. In *USENIX Security Symposium*, 2019.
- 4. Bargav Jayaraman, Lingxiao Wang, David Evans, and Quanquan Gu. Distributed learning without distress: Privacy-preserving empirical risk minimization. In *Advances in Neural Information Processing Systems*, 2018.
- 5. Lu Tian, Bargav Jayaraman, Quanquan Gu, and David Evans. Aggregating private sparse learning models using multi-party computation. In *NeurIPS Workshop on Private Multi-Party Machine Learning*, 2016.

Other Publications

- 6. Bargav Jayaraman, Hannah Li, and David Evans. Decentralized certificate authorities. *arXiv:1706.03370*, 2017.
- 7. Breno D. Cruz, Bargav Jayaraman, Anurag Dwarakanath, and Collin McMillan. Detecting vague words and phrases in requirements documents in a multilingual environment. In *IEEE International Requirements Engineering Conference (RE)*, 2017.
- 8. Bruhadeshwar Bezawada, Alex X. Liu, Bargav Jayaraman, Ann L. Wang, and R. Li. Privacy preserving string matching for cloud computing. In *IEEE International Conference on Distributed Computing Systems*, 2015.

(d) Invited Talks and Presentations

- 1. Presented a poster on "Revisiting Membership Inference Under Realistic Assumptions" at *TPDP* and *PPML workshops* co-located with *CCS* 2020 and *NeurIPS* 2020 conferences resp.
- 2. Gave an invited talk at Microsoft Research in Summer 2020 where I presented my work on membership inference attacks on machine learning models.
- 3. Gave a talk on evaluating privacy-utility trade-off of privacy preserving machine learning at *AIML seminar* held at University of Virginia in Fall 2019.
- 4. Gave a talk on evaluating privacy preserving-machine learning at Winter 2019 *DCAPS work-shop* held at University of Maryland College Park.
- 5. Presented my published work on "Evaluating Differentially Private Machine Learning in Practice" at *USENIX Security Symposium*, 2019.
- 6. Presented my published work on "Distributed Learning without Distress: Privacy-Preserving Empirical Risk Minimization" at *NeurIPS conference*, 2018.
- 7. Presented my published work on "Aggregating Private Sparse Learning Models using Multi-Party Computation" at *PPML workshop* co-located with *NeurIPS conference*, 2016.

(e) Awards and Achievements

- 1. Awarded travel grant at USENIX Security Symposium, 2019.
- 2. Awarded travel grant at NeurIPS conference, 2018.
- 3. Filed *three* patents while working at Accenture Technology Labs Bangalore.