

# Sameer Wagh

Remote – Manhattan, New York

☎ +1 (xxx) xxx-xx33 • ✉ snwagh@gmail.com • 🌐 snwagh.github.io  
in sameer-wagh • 🐙 snwagh • 🌐 sameer.wagh

## Professional Summary

For the past two years, I have served as the technical leadership at Devron, a distributed data science platform focusing on enterprise setting privacy. I led the R&D arm of Devron, bootstrapping new product verticals – vertical federated learning algorithms, privacy portals, LLM-based privacy analysis – all the way from prototyping to integration into the product. I also managed day-to-day engineering efforts along with the C-suite. I am skilled at translating complex technical concepts into clear visions and roadmaps to drive engineering efforts, as well as distilling technical details into understandable overviews tailored to executive audiences.

Prior to Devron, I spent close to a decade in academia in the space of applied cryptography and privacy enhancing technologies. I have deep expertise in multi-party computation, homomorphic encryption, federated learning, differential privacy, and developing cryptographic protocols to enable secure computation on sensitive data. I have worked on both the theoretical algorithms as well as end-to-end implementations of these systems. Some of my work has been the choice protocols for open source software and startups in the space. My strong foundation in Mathematics, background in theoretical Physics, and experience in computer science makes me uniquely creative in my problem-solving under constraints, and I look for interesting opportunities to tackle complex challenging problems in a high functioning workplace.

## Skills

**Programming:** Python, C, C++, Bash

**Management:** Tech lead, managed team sizes of 4-6 individuals (researchers + engineers)

**ML Frameworks:** Pandas, scikit-learn, Numpy, Pandasql, Dask, Ray, PyTorch, Matlab, Matplotlib

**Cloud Technologies:** AWS, GCP, S3, IAM, SageMaker, Vertex, Full stack development (start-up scale)

## Honors and Awards

**May 2020:** Finalist for the [Bede Liu Best Dissertation Award 2020](#).

**Feb 2020:** Recipient of the [Facebook Systems for ML](#) research award.

**June 2019:** Winner of the [Qualcomm Innovation Fellowship, North America region](#).

**July 2009:** Recipient of the P.L. Bhatnagar Memorial Award, as the top scorer of the Indian team at IMO.

**July 2009:** **Silver Medalist** and [India's highest scorer](#) at the 50th International Maths Olympiad, Germany.

## Publications

I have published [20+ papers](#) with over a [1000 citations](#) in top security, privacy, and cryptography conferences. My dissertation titled "New Directions in Efficient Privacy-Preserving Machine Learning" is available [here](#). You

## Employment

Oct 2021 – **Head of Privacy**  
Oct 2023 *Devron Corporation*

July 2020 – **Postdoctoral Researcher**  
Jan 2022 *University of California, Berkeley*

## Education

Sept 2014 – **Doctor of Philosophy**  
May 2020 *Electrical Engineering  
Princeton University*

Aug 2010 – **B.Tech with Honors**  
May 2014 *Engineering Physics  
Indian Institute of Technology, Madras*

can access a complete list of my publications on [my webpage](#).

## Patents

---

### Code Analysis for Sensitive Data using LLMs

September 2023

*Sameer Wagh, Kartik Chopra, and Sid Roy*

Serial Number: 18/484,058

### Federated Learning Platform and Methods for using same

August 2022

*Sameer Wagh, Kartik Chopra, and Sid Roy*

Serial number: 18/447,874

### Private Deep Neural Network Training

February 2018

*Sameer Wagh, Divya Gupta, and Nishanth Chandran*

Patent number: 403629-US-PSP / SLW Ref: 1777.778PRV

### Tunable Oblivious RAM

January 2015

*Sameer Wagh, Paul Cuff, and Prateek Mittal*

Patent number: US20170185534 A1

## Work Experience and Teaching

---

I have worked at a number of top research labs all over the world including Microsoft Research (Redmond, Cambridge (UK), and India offices), Bar Ilan University (Israel), Tata Institute of Fundamental Research (TIFR, India), Okinawa Institute of Science and Technology (OIST, Japan), Oneirix Labs (India).

In addition to my graduate school teaching at Princeton, I taught mathematics through the [Prison Teaching Initiative](#) at prisons in the central NJ area (primarily Garden State Youth Correctional Facility).

## Talks and Volunteer Services

---

I have given talks at a number of venues, a few notable ones include – Charles L. and Ann Lee Brown Distinguished Seminar Series, MGAHV India, École Polytechnique Fédérale de Lausanne (EPFL), and the AI Research Division at JP Morgan.

I have served on the peer-reviewing committee of top conferences such as Privacy Enhancing Technologies Symposium (PETS), USENIX Security Symposium (USENIX), IEEE Symposium on Security and Privacy (S&P), ACM Conference on Computer and Communications Security (CCS), Communications of the ACM (CACM), International Conference on Learning Representations (ICLR), Neural Information Processing Systems (NeurIPS).

## Other Interests

---

In my free time, I enjoy runs, triathlons, and open water swims – [Cadaqués Marnaton](#), [Harryman Triathlon](#), [Wycoff/Franklin Lakes](#), [New York Triathlon](#), [Princeton Half Marathon](#), [Escape from Alcatraz](#).

I also enjoy [graphic designing](#), some of my creative work includes designing the department t-shirt at Princeton University. I have organized [MelodEE](#), the annual talent show of Princeton ELE department for two consecutive years. During my college, I served as the captain of the [varsity soccer team](#) at IIT Madras.