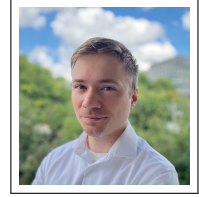


# James Choncholas

## Curriculum Vitae

✉ [james@choncholas.com](mailto:james@choncholas.com)  
🌐 [james.choncholas.com](https://james.choncholas.com)  
in [james-choncholas](https://www.linkedin.com/in/james-choncholas)  
🔗 [james-choncholas](https://github.com/james-choncholas)



*PhD student building systems for cryptography.*

### Education

2019–present **Doctor of Philosophy**, *Georgia Institute of Technology*, Atlanta, GA  
2012–2016 **Bachelor of Science**, *University of Wisconsin*, Madison, WI

### Industry Experience

Summer 2023 **Student Researcher**, *Google*, New York, NY  
- Fall 2024 Privacy preserving machine learning.  
Summer 2022 **Software Engineering Intern**, *Google*, Sunnyvale, CA  
Technical Infrastructure for Google Cloud.  
2016–2019 **Software Engineer**, *Sound Devices LLC*, Madison, WI  
Technical lead on Xilinx ARM based devices and cross-platform mobile app development.  
2015–2016 **Software Engineer Intern**, *Spacelabs Healthcare*, Madison, WI  
Automated testing and software development for medical devices.

### References

Advisor **Ada Gavrilovska**, *Georgia Institute of Technology*  
Mentor **Karn Seth**, *Google*, New York

### Conference Papers

- [1] James Choncholas, Pujith Kachana, Mateus André, Phillips Gregoire, and Ada Gavrilovska. Snail: Secure single iteration localization. In *Privacy Enhancing Technologies Symposium (PETS)*, 2024.
- [2] James Choncholas, Ketan Bhardwaj, Vlad Kolesnikov, and Ada Gavrilovska. Angler: Dark pool resource allocation. In *ACM/IEEE Symposium on Edge Computing (SEC)*, 2023.
- [3] Ke-Jou Hsu, James Choncholas, Ketan Bhardwaj, and Ada Gavrilovska. DNS Does Not Suffice for MEC-CDN. In *ACM Workshop on Hot Topics in Networks (HotNets)*, 2020.

### Workshop Papers

- [4] James Choncholas, Ketan Bhardwaj, and Ada Gavrilovska. TGh: A TEE/GC hybrid enabling confidential FaaS platforms. In *Cryptology ePrint Archive*, 2023.
- [5] James Choncholas, Ketan Bhardwaj, and Ada Gavrilovska. MPC benchmarking and optimization for edge systems. In *Semiconductor Research Corporation TECHCON*, 2021.
- [6] James Choncholas, Ketan Bhardwaj, and Ada Gavrilovska. The performance argument for blockchain-based edge DNS caching. In *ACM/IEEE Symposium on Edge Computing (SEC)*, 2021.

## ■ Posters

- [7] James Choncholas, Pujith Kachana, Mateus André, Phillips Gregoire, and Ada Gavrilovska. Snail: Secure single iteration localization. In *ACM/IEEE Symposium on Edge Computing (SEC)*, 2023.
- [8] James Choncholas, Ketan Bhardwaj, and Ada Gavrilovska. GeoENS: Blockchain-based infrastructure for service discovery at the edge. In *USENIX Workshop on Hot Topics in Edge Computing (HotEdge)*, 2020.

## ■ Patents

- [9] James Choncholas and Gregoire Phillips. Systems and methods for localization offloading using flexible multi-party computation and split device network resources for preserving privacy, 2023.
- [10] James Choncholas, Gregoire Phillips, Héctor Caltenco, and Ali El Essaili. Method and system to implement privacy-preserving collaborative semantic mapping, 2024.