

James Choncholas

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PhD Student

Researching privacy enhancing technology in distributed systems, machine learning, orchestration, and applications of secure multiparty computation.

EDUCATION

Doctor of Philosophy Atlanta, GA - *Computer Science*

SEPTEMBER 2019 - 2024 (expected)
Georgia Institute of Technology, Atlanta

Bachelor of Science Madison, WI - *Electrical Engineering*

SEPTEMBER 2012 - DECEMBER 2016
University of Wisconsin, Madison

INDUSTRY EXPERIENCE

Google Sunnyvale, CA / New York, NY – *Software Engineer Intern*

MAY 2022 - AUGUST 2022 / May 2023 - AUGUST 2023

Technical infrastructure for Google Cloud, and privacy preserving ML.

Ericsson Atlanta, GA (Remote) – *Student Researcher*

FEBRUARY 2021 - APRIL 2022

Privacy preserving computer vision. Two provisional patents filed with the WPO and paper under submission.

Sound Devices, LLC Madison, WI - *Software Engineer*

JUNE 2016 - JULY 2019

Technical lead and board bring-up on Xilinx ARM based [devices](#). Product sales on the order of tens of millions of dollars.

Cross platform mobile application development with Xamarin.

Sound Devices Wingman: [Apple App Store](#), [Google Play Store](#), [Demo](#)
A10-Tx Remote: [Apple App Store](#), [Google Play Store](#), [Demo](#)

NOTABLE PUBLICATIONS

Angler: Dark Pool Resource Allocation

ACM/IEEE Symposium on Edge Computing 2023

James Choncholas, Ketan Bhardwaj, and Ada Gavrilovska

TGh: A TEE/GC Hybrid Enabling Confidential FaaS Platforms

Cryptology ePrint Archive

James Choncholas, Ketan Bhardwaj, and Ada Gavrilovska

AWARDS

Semiconductor Research Corporation TECHCON'21

Best Presentation Runner Up (2021)

Georgia Tech President's Fellow (2019-2024)

Engineering Expo 1st Place Exhibitor -

Individual undergrad category (2015) A [music recommendation system](#)

similar to Pandora. The program used DSP techniques such as spectral centroid tracking to extract features from each of the songs in its library. After feature extraction, the program ran the K-NN machine learning algorithm to determine which songs were most similar. Over 5000 people attended. [Source Code](#).

Richardson Engineering Scholarship (2015, 2016)

LANGUAGES

C++, Python, C, C#,
JavaScript, Solidity, Matlab.