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# Supraja Sridhara

#### Education

2021-Present **ETH Zürich**, *PhD candidate*.

Secure and Trustworthy Systems group, Department of Computer Science

2019–2021 **ETH Zürich**, *M.Sc.*, 5.7/6.0.

Computer Science

2012–2016 Amrita Vishwa Vidyapeetham (University), B. Tech, 9.91/10, Gold Medal.

Computer Science and Engineering

#### Work Experience

August 2016 - Software Engineer, CISCO SYSTEMS INDIA PVT. LTD., Bangalore, Cloud August 2019 Platform and Services Group.

> Service Catalog: Developing REST APIs in Java, improving performance by clustering indices on database and introducing threading, Containerization using Docker and Kubernetes Falcon: Design and implementation of micro services in Go programming language, deployed in a containerized clustered environment using Docker and Kubernetes, data modeling for ArangoDB

#### Research

Devlore: Extending Arm CCA to Integrated Devices. A Journey Beyond Memory to Interrupt Isolation,

under submission.

Andrin Bertschi\*, Supraja Sridhara\*, Friederike Groschupp, Mark Kuhne, Benedict Schlüter, Clément Thorens, Nicolas Dutly, Srdjan Capkun, Shweta Shinde

Aster: Fixing the Android TEE Ecosystem with Arm CCA.

under submission.

Mark Kuhne, Supraja Sridhara, Andrin Bertschi, Nicolas Dutly, Srdjan Capkun, Shweta

Sigy: Breaking Intel SGX Enclaves with Malicious Exceptions & Signals, AsiaCCS '25.

Supraja Sridhara, Andrin Bertschi, Benedict Schlüter, Shweta Shinde

WeSee: Using Malicious #VC Interrupts to Break AMD SEV-SNP, IEEE S&P '24, Distinguished Paper Award.

Benedict Schlüter, Supraja Sridhara, Andrin Bertschi, Shweta Shinde

Heckler: Breaking Confidential VMs with Malicious Interrupts,

Usenix Security '24.

Benedict Schlüter, Supraja Sridhara, Mark Kuhne, Andrin Bertschi, Shweta Shinde

# Acai: Extending Arm Confidential Computing Architecture Protection from CPUs to Accelerators,

Usenix Security '24.

Supraja Sridhara, Andrin Bertschi, Benedict Schlüter, Mark Kuhne, Fabio Aliberti, Shweta Shinde

Confidential Computing with Heterogeneous Devices at Cloud-Scale, *ACSAC '24*.

Aritra Dhar, Supraja Sridhara, Shweta Shinde, Srdjan Capkun, Renzo Andri

**Global Distributed Secure Mapping of Network Addresses**, *TAURIN@SIGCOMM '21*.

Supraja Sridhara, François Wirz, Joeri de Ruiter, Caspar Schutijser, Markus Legner, Adrian Perrig

#### **Awards**

- 2024 **Distinguished Paper Award** for the paper WeSee: Using Malicious #VC Interrupts to Break AMD SEV-SNP at IEEE Symposium for Security and Privacy 2024
- 2016 Gold medal in B. Tech in Computer Science and Engineering
- 2013, 2014, **Certificate of Merit** for securing first place in the examinations held during the 2015 academic year 2012-13, 2013-14 and 2014-15

#### Invited Talks

- July 2025 **System Security Seminar Series**, *Max Planck Institute for Software Systems*, Saarbrucken, Germany,
  - Extending the Boundaries of Confidential Computing from CPUs to Accelerators.
- June 2025 **Spotlight Lightening Talk**, *Confidential Computing Summit*, San Francisco, USA,

Acai: Protecting Accelerator Execution with Arm CCA.

March 2025 **Huawei Future Device Technology Summit** - **Aurora Summit**, *Huawei*, Oulu, Finland,

Extending the Boundaries of Confidential Computing from CPUs to Accelerators.

March 2024 Lunch Seminar, Systems Group, ETH Zurich,

Zurich, Switzerland,

Acai: Protecting Accelerator Execution with Arm CCA.

- November **ZISC Seminar**, Zurich Center for Information Security and Privacy Center (ZISC),
  - 2023 Zurich, Switzerland,

Acai: Protecting Accelerator Execution with Arm CCA.

#### Conference Talks

- August 2024 USENIX Security Symposium'24, Philadelphia, USA,
  - Acai: Protecting Accelerator Execution with Arm CCA.
- August 2021 TAURIN@SIGCOMM'21, Online,

Global Distributed Secure Mapping of Network Addresses.

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July 2024 –	Intel Labs, Remote, Zurich.
September	Worked on securing device accesses with confidential computing and trusted IO.
2024	
January 2016	Cisco Systems India Pvt. Ltd., Bangalore, Cloud Platform and Services

anuary 2016 Cisco Systems India Pvt. Ltd., Bangalore, Cloud Platform and Services Group.
July 2016 Service Catalog: Design and implementation of an email template framework to read from FTL files to trigger emails on events

## Teaching@ETH Zürich

2022, 2023,	Teaching Assistant for Computer Networks
2025	
2023, 2024	Teaching Assistant for System Security
2021, 2022	Teaching Assistant for Information Security Lab
2021	Student Teaching Assistant for Applied Cryptography
2020	Student Teaching Assistant for Concepts of Object Oriented Programming

## Volunteer Experience

June 2018 – **U&I Teach**, Akkamahadevi Seva Samaja.

August 2019 Tutor under privileged children in Science, Mathematics and English every week