# FLORIAN SURI-PAYER

PhD Candidate - Computer Science - Cornell University

LinkedIn, Web

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## **EDUCATION**

## Doctor of Philosophy (Ph.D.), Computer Science

August 2018 - Present

Research Area: Distributed Systems

Supervised by Lorenzo Alvisi & Natacha Crooks

Cornell University, Ithaca, USA

GPA: 4.2

## Bachelor of Science (B.Sc.), Computer Science.

October 2015 - August 2018

Thesis: Unsupervised Anomaly Detection using ARIMA Forecasting

Supervised by Florian Schmidt & Odej Kao

TU Berlin, Berlin, Germany

Grade 1.18 (summa cum laude)

## RESEARCH INTERESTS

My passion lies in analytical thinking and formal rigor as applied to practical computing systems. My current research addresses the design of scalable and robust distributed systems, specifically efficient Byzantine fault tolerance, and low latency transaction processing with high throughput.

## AWARDS AND HONORS

## BS Thesis recognition and Honors list, TU Berlin.

2018

Ranked Top 1% of all graduating students across all fields of studies. Thesis with distinction (1.0).

## Nominated (2x) to German National Stipend Foundation

2015 & 2018

Top 5% of students across all fields of studies across Germany.

## **High School Valedictorian Honors**

2015

Highest achievable summa cum laude grade (1.0) in national-level exams.

## PEER-REVIEWED PUBLICATIONS

Eurosys'23, Morty: Scaling Concurrency Control with Re-Execution

Matthew Burke, Florian Suri-Payer, Jeffrey Helt, Lorenzo Alvisi, and Natacha Crooks.

**DISC'22**, Its not easy to relax: liveness in chained BFT protocols (Brief Annoncement)

Neil Giridharan, Florian Suri-Payer, Ittai Abraham, Natacha Crooks, and Heidi Howard.

SOSP'21, Basil: Breaking up BFT with ACID (transactions)

Florian Suri-Payer, Matthew Burke, Zheng Wang, Yunhao Zhang, Lorenzo Alvisi, and Natacha Crooks.

UCC Companion'18, Unsupervised Anomaly Event Detection for Cloud Monitoring Using Online Arima

Florian Schmidt, Florian Suri-Payer, Anton Gulenko, Marcel Wallschlager, Alexander Acker and Odej Kao.

CloudCom'18, Unsupervised Anomaly Event Detection for VNF Service Monitoring Using Multivariate Online Arima

Florian Schmidt, Florian Suri-Payer, Anton Gulenko, Marcel Wallschlager, Alexander Acker and Odej Kao.

#### RELEVANT WORK EXERIENCE

# UC Berkeley: Visiting Researcher

March-May 2022

- Berkeley, USA
  - RISELab, Data Systems and Foundation Group, Supervised by Natacha Crooks
  - Work on theoretical foundations of blockchain consensus & query processing for blockchain systems

# Microsoft Research Cambridge: Research Intern

June-August 2021

- Cambridge, UK
  - Confidential Computing Group, Supervisied by Antoine Delignat-Lavaud & Cedric Fournet
  - Work on Microsoft's Confidential Consortium Framework

# Cornell Univserity Graduate Researcher

August 2018 - Present

- Ithaca, USA
  - Laboratory for Advanced Systems Research, supervised by Lorenzo Alvisi
  - Work on transactional blockchain systems & concurrency control for distributed databases

## RELEVANT TEACHING EXERIENCE

Operating Systems (CS4410), Cornell University, Head Teaching Assistant 2	019, 2020
Object Oriented Programming (CS2210), Cornell University, Head Teaching Assistant	2018
Object Oriented Programming Add-On (CS2211), Cornell University, Co-instructor	2018
Algorithms and Data Structures, TU Berlin, Teaching Assistant	2018
Discrete Structures, TU Berlin, Teaching Assistant	2017
Computability and Complexity, TU Berlin, Teaching Assistant	2017
Formal Languages and Automatons, TU Berlin, Teaching Assistant	2016

## TECHNICAL & SOFT SKILLS

- **Independent problem solving skills**, as exercised in day to day research work, and demonstrated by project work and publications.
- Strong communication abilities. Extensive experience giving high profile talks, teaching students in class room and office hour settings, as well as research collaborations. Substantial writing experience through paper writing, grant applications, and tech-blog posts.
- Leadership experience, both in a research setting mentoring multiple undergrads –, and teaching setting managing class organization, TA coordination, and exam design.
- Programming Skills: C++/C, Java, Python
- Auxillary Tools: Latex, Git, MS Office, CloudLab

## **MISC**

#### Academic Service

• ACM TOCS'2020 (Reviewer), OSDI'2020 (Reviewer aide), SOSP'2019 (Reviewer aide)

#### Extra Curricular

• Licensed Tennis Trainer (German Level C), Part of Cornell Club Tennis

## Citizenship: USA, Austria

#### LANGUAGES