

## EDUCATION

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### Princeton University

Princeton, NJ

PhD in Computer Science, advised by Dr. Wyatt Lloyd & Dr. Ethan Katz-Bassett (Columbia)

2017–2023

**Dissertation:** “Nabu: Unlocking Better Cache Performance at Lower Cost with Expiration Time-based Flash Caching”.

### University of Southern California

Los Angeles, CA

PhD in Computer Science, advised by Dr. Wyatt Lloyd & Dr. Ethan Katz-Bassett (Columbia).

2016–2017

Completed at Princeton University.

### University of California, Los Angeles

Los Angeles, CA

MS in Computer Science, advised by Dr. Miodrag Potkonjak

2014–2016

**MS Thesis:** “Evaluating 802.11p in Software-Defined Radio using Realistic Channel Parameters”.

Supervised by Dr. Miodrag Potkonjak and Dr. Bastian Bloessl (then at U. Paderborn).

### University of Chicago

Chicago, IL

BA with Honors in Linguistics

2005–2009

**BA Thesis:** “Predictability and Motivation for the Genitive/Dative Alternation in Modern German Constructions for Attributive Nominal Relations”. Supervised by Dr. Steven Clancy.

## PUBLICATIONS

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- Lim K, Giordano M, **Stavrinos T**, Nelson J, Zhang I, Kasikci B, Anderson T. “Beehive: A Flexible Network Stack for Direct-Attached Accelerators.” In *MICRO* 2024.
- Park J, **Stavrinos T**, Peter S, Anderson T. “EMPower: The Case for a Cloud Power Control Plane.” In *HotCarbon* 2024.
- Xie D, **Stavrinos T**, Zhu K, Peter S, Kasikci B, Anderson T. “Can Storage Devices be Power Adaptive?” In *HotStorage* 2024.
- Mwotil A, Anderson T, Kanagwa B, **Stavrinos T**, Bainomugisha E. “LowPaxos: State Machine Replication for Low Resource Settings.” In *IEEE Access* 2024.
- **Stavrinos T**. “Nabu: Unlocking Better Cache Performance at Lower Cost With Expiration Time-Based Flash Caching.” PhD Thesis 2023.
- Hodsdon C, **Stavrinos T**, Katz-Bassett E, Lloyd W. “MASON: Scalable, Contiguous Sequencing for Building Consistent Services.” In *Journal of Systems Research (JSys)* 2023.
- **Stavrinos T**, Berger D, Katz-Bassett E, Lloyd W. “Don’t Be a Blockhead: Zoned Namespaces Make Work on Conventional SSDs Obsolete.” In *HotOS* 2021.
- Pan S, **Stavrinos T**, Zhang Y, Sikaria A, Zakharov P, Sharma A, Shankar P S, Shuey M, Wareing R, Gangapuram M, Cao G, Preseau C, Singh P, Patiejunas K, Tipton JR, Katz-Bassett E, Lloyd W. “Facebook’s Tectonic Filesystem: Efficiency from Exascale.” In *FAST* 2021.
- Guo J, Xu T, **Stavrinos T**, Potkonjak M. “Enabling Environmentally-Powered Indoor Sensor Networks with Dynamic Routing and Operation.” In *PATMOS* 2016.
- Pannetier N, **Stavrinos T**, Ng P, Herbst M, Zaitsev M, Young K, Matson G, Schuff N. “Quantitative Framework for Prospective Motion Correction Evaluation.” In *Magnetic Resonance in Medicine* 2016.

## WORK EXPERIENCE

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### University of Washington

Seattle, WA

Postdoctoral Researcher, Paul G. Allen School of Computer Science and Engineering

July 2023–January 2025

- Researched power- and carbon-aware systems within the Future of Cloud Infrastructure (FOCI) project, with a focus on storage systems
- Advised graduate and undergraduate students on projects

### Microsoft Research

Cambridge, UK

Research Intern, Holographic Storage Team

Fall 2022

- Built simulator to evaluate performance and endurance impact of caching on flash-based SSDs (C++, Python)
- Evaluated feasibility of caching IO-heavy workloads on flash

### Facebook

Menlo Park, CA

Software Engineering Intern, Storage Team

Winter 2020

- Explored performance versus cost tradeoffs for flash-based SSDs in Facebook’s distributed filesystem (C++)
- Collaborated with storage team to publish experience paper about Facebook’s storage infrastructure

### Google

San Francisco, CA

Software Engineering Intern, Traffic Team

Summer 2016

- Integrated regression detection service into binary rollout framework to automate evaluation of updates (Python)
- Applied integrated framework to automate rollouts for API management service (Python, C)

### 3Scan, Inc.

San Francisco, CA

Software Development Intern

Summer 2015

- Implemented Firmata protocol for sensor-to-microscope communication (Python, C)
- Built interactive shell for testing sensor system (Python)

### 3Scan, Inc.

San Francisco, CA

Software Development Intern

Summer 2014

- Integrated microscope sensors and focus mechanism into Arduino microcontroller (C, C++)
- Built browser dashboard for monitoring system status (JavaScript, HTML, MongoDB, d3)

### Center for Imaging of Neurodegenerative Diseases

San Francisco, CA

Research Associate

June 2012–May 2014

- Carried out texture analysis experiments to quantify MRI motion artifacts (Python)
- Implemented fMRI network analysis pipeline with NetworkX (Python) and Circos visualization software

## ACADEMIC & DEPARTMENTAL SERVICE

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- **USENIX ATC 2024 Reviewer** 2024
- **NSDI 2024 Reviewer and Scribe** 2023
- **OSDI 2023 External Reviewer** 2023
- **Princeton CS Department Climate & Inclusion Committee PhD student representative** 2020–2022
- **Internet Measurement Conference (IMC) 2022 External Reviewer** 2022
- **OSDI 2021 External Reviewer** 2021
- **OSDI 2018 Topic Preview Sessions Organizer** 2018
- **OSDI 2018 External Reviewer** 2018

- **NSDI 2018 External Reviewer** 2018
- **Internet Measurement Conference (IMC) 2017 Shadow PC Member** 2017
- **SIGCOMM 2017 Topic Preview Sessions Co-Organizer** 2017
- **NSDI 2017 External Reviewer** 2017

## TEACHING

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- **Teaching Assistant** at Princeton University Spring 2019  
*Introduction to Computer Science (COS 126)*
- **Teaching Assistant** at Princeton University Fall 2018  
*Advanced Distributed Systems (COS 418)*
- **Teaching Assistant** at University of California, Los Angeles Winter & Spring 2016  
*Introduction to Operating Systems (CS 111)*

## SCHOLARSHIPS AND AWARDS

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- **Chris Edmondson-Yurkanan Travel Grant** 2018  
Grant awarded for service to SIG to support travel to SIGCOMM
- **Open Science Data Cloud PIRE Fellow** 2015  
NSF-sponsored fellowship awarded to fund research internship at the University of Amsterdam
- **Graduate Opportunity Fellowship Recipient** 2014–2015  
Fellowship awarded to cover full tuition and living expenses for first year of Master's degree
- **Benjamin A. Gilman International Scholarship** 2007  
Scholarship awarded to fund Civilization Studies Semester Abroad in Athens, Greece

## LANGUAGES & FRAMEWORKS

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- **Computer Languages:** C, C++, Python
- **Software:** SPDK, DPDK, QEMU
- **Natural Languages:** advanced German, conversational Spanish, beginner Greek