Theano Stavrinos

Website: princeton.cs.edu/~theanos Email: theano@princeton.edu

EDUCATION

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).

Completed at Princeton University.

2016-2017

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

- Stavrinos T, Berger D, Katz-Bassett E, Lloyd W. "Nabu: Unlocking Better Cache Performance and Longer SSD Lifespans with Expiration Times." In submission.
- 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.

Academic & Departmental Service

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

Work Experience

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 high-access workload 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

Research Associate

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 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

TEACHING

• Teaching Assistant at Princeton University Introduction to Computer Science (COS 126) Spring 2019

• Teaching Assistant at Princeton University
Advanced Distributed Systems (COS 418)

Fall 2018

• Teaching Assistant at University of California, Los Angeles Introduction to Operating Systems (CS 111) Winter & Spring 2016

Languages & Frameworks

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