Ioannis **Zarkadas**

New York, USA

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Experience

Google   *San Fransisco, CA*

RESEARCH INTERN IN SYSTEMS RESEARCH GROUP   *May 2023 - Present*

Columbia University   *New York, NY*

PHD RESEARCHER   *Sept. 2021 - Present*

- Research into accelerating computer systems using eBPF.
- Advisor: Asaf Cidon

Arrikto   *Athens, Greece*

SOFTWARE ENGINEER   *Apr. 2019 - June 2021*

- Major contributor to Kubeflow, an open-source MLOps platform founded by Google. Tech lead of the Manifests and Notebooks Kubeflow Working Groups, overseeing technical direction and implementation.
- Designed and implemented Kubeflow's security and multi-tenancy architecture alongside engineers from Google and Cisco. This work enabled authentication, authorization, auditing and multi-tenancy for Kubeflow's core services (Notebooks, Pipelines, Serving).
- Developed the deployment and upgrade software for Arrikto's Kubeflow distribution, scaling it from the first small customer to multi-million accounts that deployed in 100s of clusters. Extended Kustomize and Git to fit our usage, enabling the rapid expansion of Arrikto's customer base.
- Delivered 3 talks on my work on Kubeflow in leading industry conferences alongside partners from Google and Cisco (ODSC, KubeCon Amsterdam, KubeCon San Diego).

Arrikto   *Athens, Greece*

SOFTWARE ENGINEERING INTERN   *Apr. 2018 - Mar. 2019*

- Designed and implemented a Kubernetes operator for managing Scylla, a Cassandra-compatible database written in C++. Scylla is currently using the operator to support customers deploying on Kubernetes.
- Designed and implemented a Kubernetes operator for managing Apache Cassandra, which was contributed to the rook project. Project was widely adopted with over 1 million Docker image downloads.

Skills

Programming   C, C++, Python, Go, eBPF
Cloud   Kubernetes, GCP, Security Architecture (oAuth, IAP)

Education

Columbia University   *New York, NY*

PHD IN COMPUTER SCIENCE   *Sept. 2021 - Present*

National Technical University of Athens   *Athens, Greece*

INTEGRATED BS/MS IN ELECTRICAL AND COMPUTER ENGINEERING   *Dec. 2013 - Mar. 2019*

Honors & Awards

2023   **Stavros Niarchos Foundation Scholarship**
2022   **Gerondelis Foundation Scholarship**
2022   **Best Paper Award for XRP paper**, OSDI

Publications

2024   **Accellerating Disaggregated Storage (NVMEoF) with eBPF**, OSDI (to be submitted)
       First Author (full list not public yet - to be submitted)
2022   **XRP: In-Kernel Storage Functions with eBPF**, OSDI
       Yuhong Zhong, Haoyu Li, Yu Jian Wu, Ioannis Zarkadas, Jeffrey Tao, Evan Mesterhazy,
       Michael Makris, Junfeng Yang, Amy Tai, Ryan Stutsman, Asaf Cidon