NIV DAYAN

email	nivdayan@gmail.com
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EDUCATION & ACADEMIC EMPLOYMENT

Harvard	*2015–current*	**Postdoc in Computer Science**

Goal: Identifying the best possible performance trade-offs for log-structured key-value stores.
Advisor: Stratos Idreos

IT University of Copenhagen	*2012–2015*	**PhD in Computer Science**

Thesis: Modelling and Managing SSD Write-Amplification.
Advisor: Philippe Bonnet

IT University of Copenhagen	*2010–2012*	**MSc in Computer Science**

Thesis: Predictable I/Os and Efficient B-Tree Updates on Flash-Based Solid State Drives.
Advisor: Philippe Bonnet

University of Dundee	*2007–2010*	**BSc in Computer Science and Economics**

AWARDS

SIGMOD '17	**Best of ACM SIGMOD.** Our paper on *Monkey: Optimal Navigable Key-Value Store* was selected as one of the four best papers of the ACM SIGMOD International Conference on Management of Data.

SELECTED PUBLICATIONS ON KEY-VALUE STORES

SIGMOD '19	*The Log-Structured Merge-Bush & the Wacky Continuum.* **Niv Dayan**, Stratos Idreos.
CIDR '19	*Design Continuums and the Path Toward Self-Designing Key-Value Stores that Know and Learn.* Stratos Idreos, **Niv Dayan**, Wilson Qin, Mali Akmanalp, Sophie Hilgard, Andrew Ross, James Lennon, Varun Jain, Harshita Gupta, David Li, Zichen Zhu.
SIGMOD '18	*Dostoevsky: Better Space-Time Trade-Offs for LSM-Tree Based Key-Value Stores via Adaptive Removal of Superfluous Merging.* **Niv Dayan**, Stratos Idreos.
TODS '18	*Optimal Bloom Filters and Adaptive Merging for LSM-Trees.* **Niv Dayan**, Manos Athanassoulis, Stratos Idreos.
IEEE Data Engineering Bulletin '18	*The Periodic Table of Data Structures.* Stratos Idreos, Kostas Zoumpatianos, Manos Athanassoulis, **Niv Dayan**, Brian Hentschel, Michael S. Kester, Demi Guo, Lukas Maas, Wilson Qin, Abdul Wasay, Yiyou Sun.
SIGMOD '17	*Monkey: Optimal Navigable Key-Value Store.* **Niv Dayan**, Manos Athanassoulis, Stratos Idreos.

SOFTWARE

2012 - 2015	**EagleTree - SSD Simulator**	

Simulation framework for analyzing the behavior of SSDs, available at
https://github.com/ClydeProjects/EagleTree.

RECENT TALKS AND LECTURES

2019	MSR Redmond · University of Seattle
2018	NetApp · Facebook · Vertica · University of Chicago, · University of Wisconsin
2017	NetApp · Facebook · Vertica · University of Dresden

TEACHING

Harvard '18	Teaching assistant in AC297, a MSc Course on data science.
Harvard '18	Teaching assistant in CS165, a BSc Course on data systems.
Harvard '17	Teaching assistant in AC297, a MSc Course on data science.
Harvard '17	Teaching assistant in CS165, a BSc Course on data systems.
Harvard '16	Teaching assistant in AC297, a MSc Course on data science.
IT Univ. of Copenhagen '14	Teaching assistant in a MSc course on database tuning.
Univ. of Dundee '09	Teaching assistant in a BSc course on data structures.

WORK EXPERIENCE

Podio '12	Data analyst.
Sunstone Capital '12	Data analyst.
Netmester '11-'12	Back-end web-developer.
Academia Sinica '10	Research Intern.
Calico Jack '09	Web development intern.

OTHER INFORMATION

Interests	guitar · science fiction · nonfiction · Brazilian Jiu Jitsu
Languages	English · Hebrew

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