

VASILIS PAPAVALASILEIOU

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SUMMARY

Backend developer with a Ph.D. in Computer Science and 10 years of experience in large-scale systems. Pragmatic with functional programming, versatile across technologies.

EXPERIENCE

Ahrefs

Jan 2019 – Dec 2024

Backend Developer

Remote

- Led development of one of the world's largest Web crawlers, processing billions of pages per day
- Built and maintained distributed OCaml backends for reliable, high-throughput data processing
- Developed petabyte-scale storage solutions using ClickHouse and other DB systems
- Contributed to DevOps across thousands of Linux hosts and multi-petabyte storage clusters

BeSport

Jul 2017 – Oct 2018

Full-Stack Developer

Paris, France

- Delivered production-ready social features in OCaml with strong correctness guarantees
- Created article classification algorithms improving content discovery
- Continued core contributions to the Ocsigen Web Framework

Paris Diderot University

Jun 2015 – Jun 2017

Postdoctoral Researcher

Paris, France

- Maintained and extended the open-source Ocsigen Web Framework for OCaml
- Developed a reactive framework to streamline client-server Web development
- Introduced advanced type system features for safe client-server communication
- Implemented a new high-performance HTTP backend

EDUCATION

Northeastern University

September 2009 - June 2015

Ph.D. in Computer Science

Boston, MA, USA

- Dissertation: Mathematical Programming Modulo Theories
- Advisor: Pete Manolios
- 6 peer-reviewed publications available at <https://github.com/vasilisp/pub>

National Technical University of Athens

September 2003 - July 2009

Diploma in Electrical and Computer Engineering

Athens, Greece

- Concentration: Computer Science
- Diploma Project: Program Verification with Coq

SKILLS

Programming	OCaml, Go, C, C++, Python, Java, Common Lisp
Databases	ClickHouse, PostgreSQL, MySQL, RocksDB
Other	Linux, DevOps, LLM technology, Formal Methods
Languages	Greek, English, French (full professional proficiency), German (basic)