

Nikos Vasilakis

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EDUCATION

- current Ph.D. in Computer and Information Science, University of Pennsylvania
Thesis: Andromeda — A Distributed Userspace
Advisor: Jonathan M. Smith
- 2013 M.Sc. in Computer and Information Science, University of Pennsylvania
- 2009 M.ENG. in Computer Engineering and Informatics, University of Patras
Thesis: A Novel Application of Ubiquitous Computing Using Interactive Installations
Advisors: Ioannis Chatzigiannakis and Paul G. Spirakis

WORK EXPERIENCE

- 2015.05 – 2016.03 Software Engineering Intern, VMware Inc. — Palo Alto
Worked on Xenon (Java), a distributed micro-service framework: (i) designed and implemented a scalable protocol for distributed transactions, (ii) implemented performance monitoring services.
- 2012.06 – 2012.08 Software Engineering Intern, Computational Medicine Lab, Thomas Jefferson University — Philadelphia
Worked on Handsfree (Java, Shell, JS), a distributed RNA mapping service: (i) co-designed and implemented backend scheduling and placement infrastructure, (ii) built a domain-specific language for asynchronous job control, (iii) developed its user interface (cli and web).
- 2009.01 – 2011.06 Software Engineer to Engineering Lead, Computer Technology Institute — Athens
Worked on EduTubePlus (Java, Shell, SQL), an educational YouTube-like service for the EU: (i) redesigned database (resulting in 10× query improvements), (ii) deployed extensive devops infrastructure (e.g., VCS, CI, reviews, etc.), (iii) implemented critical backend logic, (iv) co-led the integration of several packages between partners.

SELECTED PAPERS

- EuroSys18 **Nikos Vasilakis**, Ben Karel, and Jonathan M. Smith, *Ur: A Distributed Userspace*, EuroSys 2018 (Under review)
- S&P18 Nick Roessler, **Nikos Vasilakis**, Nathan Dautenhahn, and André DeHon, *Microtags and Macrostacks*, IEEE S&P 2018 (Under review)
- NDSS18 **Nikos Vasilakis**, Ben Karel, Nick Roessler, Nathan Dautenhahn, André DeHon, and Jonathan M. Smith, *BreakApp: Automated, Flexible Application Compartmentalization*, IEEE Networked and Distributed Systems Security Symposium (NDSS18), San Diego, CA, February 18–21, 2018 (To appear)
- APSys17 **Nikos Vasilakis**, Yash Palkhiwala, Jonathan M. Smith. *Query-efficient Partitions for Dynamic Data*. 8th ACM Asia-Pacific Conference on Systems (APSys2017), Mumbai, India, September 2, 2017
- HotOS15 **Nikos Vasilakis**, Ben Karel, and Jonathan M. Smith, *From Lone Dwarfs to Giant Superclusters: Rethinking Operating System Abstractions for the Cloud*, 15th Workshop on Hot Topics in Operating Systems (HotOS XV), Kartause Ittingen, Switzerland, May 18–20, 2015
- ASPLOS15 Udit Dhawan, Cătălin Hrițcu, Rafi Rubín, **Nikos Vasilakis**, Silviu Chiricescu, Jonathan M. Smith, Thomas F. Knight Jr., Benjamin C. Pierce, and André DeHon, *Architectural Support for Software-Defined Metadata Processing*, 12th International Conference on Architectural Support for Programming Languages and Operating Systems (ASPLOS2015) Istanbul, Turkey, March 14–18, 2015
- DILS13 Phillipe Loher, **Nikos Vasilakis**, John Malamon, Huang-Wen Chen, and Isidore Rigoutsos, *HandsFree: Next Generation Sequence Processing, Mapping and Analysis Made Easy*, 9th International Conference on Data Integration in the Life Sciences (DILS), Montreal, QC, Canada, July 11–12, 2013
- ACE09 Orestis Akribopoulos, Marios Logaras, **Nikos Vasilakis**, Panagiotis Kokkinos, Georgios Mylonas, Ioannis Chatzigiannakis, and Paul Spirakis *Developing Multiplayer Pervasive Games and Networked Interactive Installations using Ad Hoc Mobile Sensor Nets*, 6th ACM International Conference on Advances in Computer Entertainment Technology, Athens, Greece, October 29–31, 2009
- SENSYS08 Orestis Akribopoulos, Marios Logaras, **Nikos Vasilakis**, Panagiotis Kokkinos, Georgios Mylonas, and Ioannis Chatzigiannakis, *Using Wireless Sensor Networks to Develop Pervasive Multi-player Games*, 6th ACM Conference on Embedded Networked Sensor Systems (SENSYS 2008), Raleigh, NC, November 5–7, 2008

HONORS AND AWARDS

- 2017 Penn Research iTalks, Audience Award (BreakApp)
- 2017 ACM/SIGOPS, APSys Travel Grant (Unispace)
- 2015 ACM/SIGARCH, ASPLOS Travel Grant (PUMP)
- 2015 UD HenHatch Entrepreneurship, 3rd place (GoHappy)
- 2014 NYC Media Lab Summit, 3rd place (Gistly)
- 2014 CCNY Zahn Entrepreneurship, Runner-up (Gistly)
- 2010 PC & T3 Magazine, Tech Excellence Award (FinN)
- 2009 ACM/SIGCHI ACE, Golden Creative Showcase Award (FinN)
- 2008 IEEE SenSys, Best Demo Award (FinN)

SKILLS

Experienced: Java{Script,}, Bash, Git*, {No,}SQL, Haskell, Lua, Coq, Python, Rust; *Experienced-but-avoiding:* C, Ant, PHP, XML

INTERESTS

Sports: tennis, swimming; arts: music synthesis, cinema; other: history, travelling, teaching.