

Nikos Bikakis

[Short CV Version]

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Education

- 2016 Ph.D., Computer Science
National Technical University of Athens, Greece
Thesis: Personalized, Semantic and Exploratory Data Analysis
Available at: www.nbikakis.com/thesis.pdf
Advisor: Prof. Timos Sellis
- 2009 Diploma in Electronic & Computer Engineering
Technical University of Crete, Greece

Positions

- Oct. 2022 – Assistance Professor — Department of Electronic Engineering, HMU, Greece
Now
- Sept. 2021 – Associate Researcher — ATHENA Research Center, Greece
now
- March 2022 – Research Engineer — Research Labs, Marine Traffic Inc., Greece
Oct. 2022
- 2019 – 2021 Postdoctoral Fellow — ATHENA Research Center, Greece
- 2019 – 2020 Data Engineer/Scientist — Atypon Inc., Santa Clara/California [Greece Dept.]
- 2018 – 2020 Postdoctoral Fellow — Univ. of Ioannina, Greece
- 2018 – 2019 Data Engineer/Scientist — RedLink Inc., Santa Clara/California [Greece Dept.]
- 2017 – 2018 Postdoctoral Fellow — ATHENA Research Center, Greece
- 2016 – 2017 Postdoctoral Fellow — Athens Univ. of Economics & Business, Greece
- 2010 – 2016 Doctoral Fellow — ATHENA Research Center, Greece

Research Interests

- **Big Data Analytics:** Human-Centered Data Management, Visual Analytics, Data Structures & Indexing, Spatial & Graph Exploration.
- **Social & Spatial Data Analytics:** Social, Location & Event-based Networks, Spatial Data Management, Geospatial Analytics, Influence & Revenue Maximization.
- **Recommendation & Personalization:** Personalized Data Management, User Preferences, Recommendations, Ranking Models & Methods.
- **Computationally Hard Problems:** Efficient & Scalable Algorithms, Optimization Problems, Complexity Analysis, External Memory Algorithms.
- **Data Semantics:** Semantic Data Integration, Knowledge Graphs, Linked Data, Semantic Web, XML Data, Semantic Information Retrieval.

Professional Service [Selected]

- **Editor (Board, Guest):** Frontiers in Big Data [*Editorial Board*] / Open Journal of Databases [*Editorial Board*] / IEEE Computer Graphics and Applications [*Guest Editor*, 2022] / Big Data Research Journal, Elsevier [*Guest Editor*, 2020 & 2018] / Journal of Web Semantics, Elsevier [*Guest Editorial Board*, 2017].
- **Organizer & Chair:** 1st – 6th Intl. Workshop on Big Data Visual Exploration & Analytics, EDBT/ICDT [*Organizer*, 2023–2018] / 24th Intl. Conf. on Extending Database Technology, EDBT/ICDT 2021 [*Session Chair*] / 22nd IEEE Intl. Conf. on Mobile Data Management, [*Publicity Chair*, 2021] / 19th Intl. Conf. on Database Systems for Advanced Applications [*Session Chair*, 2014].
- **Program Committee:** 30+ Intl. Conferences, e.g., EDBT [*Senior PC*, 2023, 21], DASFAA [*Senior PC*, 2024–21], SIGMOD 23, WWW 22, CIKM 22–20.
- **Reviewer:** 20+ Prestigious Journals, e.g., TODS, VLDBJ, TVCG, TKDD, TKDE, Bioinformatics.

Selected Publications

Metrics: Citations: 1200 | h-index: 19 [Google Scholar, August 2023]

- **[Book]** L. Po, **N. Bikakis**, F. Desimoni, G. Papastefanatos: “*Lined Data Visualization: Techniques, Tools and Big Data*”. Springer, Morgan & Claypool, 2020 Homepage: www.linkeddatavisualization.com
“**Among the top-5 most downloaded book (in 2020) in the Data, Semantics, and Knowledge series.**” (Morgan & Claypool Publishers, 2021)
- S. Maroulis, **N. Bikakis**, G. Papastefanatos, P. Vassiliadis, Y. Vasiliou: “*Resource-Aware Adaptive Indexing for In-situ Visual Exploration and Analytics*”. VLDB Journal, 2022
- S. Maroulis, **N. Bikakis**, G. Papastefanatos, P. Vassiliadis, Y. Vasiliou: “*RawVis: A System for Efficient In-situ Visual Analytics*”. In Proc. of 45th ACM Intl. Conf. on Management of Data (ACM SIGMOD/PODS 2021)

- **N. Bikakis**, S. Maroulis, G. Papastefanatos, P. Vassiliadis: “*In-Situ Visual Exploration over Big Raw Data*”. Information Systems (IS), Elsevier, 2020
- G. Andrienko, N. Andrienko, S. Drucker, J.-D. Fekete, D. Fisher, S. Idreos, T. Kraska, G. Li, K.-L. Ma, J.D. Mackinlay, A. Oulasvirta, A. Schreck, H. Schmann, M. Stonebraker, D. Auber, **N. Bikakis**, P.K. Chrysanthis, G. Papastefanatos, M. Sharaf: “*Big Data Visualization and Analytics: Future Research Challenges and Emerging Applications*”. In Proc. of 3rd Intl. Workshop on Big Data Visual Exploration & Analytics (BigVis 2020) — *Also appears on two ACM SIGMOD Blog posts.*
- **N. Bikakis**: “*Big Data Visualization Tools*”. Encyclopedia of Big Data Technologies, Springer, 2019 (1st ed.), 2023 (2nd ed.)
- **N. Bikakis**, V. Kalogeraki, D. Gunopulos: “*Social Event Scheduling*”. In Proc. of 34th IEEE Intl. Conf. on Data Engineering (ICDE 2018)
- **N. Bikakis**, S. Maroulis, G. Papastefanatos, P. Vassiliadis: “*RawVis: Visual Exploration over Big Raw Data*”. In Proc. of 22nd Intl. Conf. on Advances in Databases and Information Systems (ADBIS 2018) [**Best Paper Award**]
- N. Bikakis, J. Liagouris, M. Kromida, G. Papastefanatos, T. Sellis: “*graphVizdb: A Scalable Platform for Interactive Large Graph Visualization*”. In Proc. of 32nd IEEE Intl. Conf. on Data Engineering (ICDE 2016)
- **N. Bikakis**, K. Benouaret, D. Sacharidis: “*Finding Desirable Objects under Group Categorical Preferences*”. Knowledge and Information Systems Journal (KAIS), Springer 2015
- **N. Bikakis**, J. Liagouris, M. Kromida, G. Papastefanatos, T. Sellis: “*Towards Scalable Visual Exploration of Very Large RDF Graphs*”. In Proc. of 12th Extended Semantic Web Conf. (ESWC 2015) [**Best Short Paper Award**]
- P. Bouros, D. Sacharidis, **N. Bikakis**: “*Finding the Most Influential Local Users in Location-Based Social Networks*”. In Proc. of 22nd ACM Intl. Conf. on Advances in Geographic Information Systems (SIGSPATIAL 2014)
- **N. Bikakis**, C. Tsinaraki, I. Stavrakantonakis, N. Gioldasis, S. Christodoulakis: “*The SPARQL2XQuery Interoperability Framework. Utilizing Schema Mapping, Schema Transformation and Query Translation to Integrate XML and the Semantic Web*”. World Wide Web Journal (WWWJ), Springer 2013
- K. Makris, **N. Bikakis**, N. Gioldasis, S. Christodoulakis: “*SPARQL-RW: Transparent Query Access over Mapped RDF Data Sources*”. In Proc. of 15th Intl. Conf. on Extending Database Technology (EDBT 2012)