

# Konstantinos Xirogiannopoulos

---

3220 A.V. Williams Bldg  
College Park, MD 20740  
kostasx@cs.umd.edu

**INTERESTS** I am interested in database systems, big data management, large-scale data analytics and distributed systems

**EDUCATION** *PhD. in Computer Science,* August 2014 - currently  
University of Maryland, College Park  
*Advisor:* Prof. Amol Deshpande

*BSc. in Computer Science,* Sept. 2009 - Jan. 2014  
Athens University of Economics and Business  
*Ranked in the top 7.5% in past five years of graduates*

**HONORS & AWARDS**

- Dean's Fellowship  
*University of Maryland, College Park*
- Honorary Scholarship and Award for Academic and Moral distinction on first year (2009-10) *State Scholarships Foundation*  
(Ranked #1 / 240)

**RESEARCH EXPERIENCE** *Graduate Research Assistant* June 2015 - currently  
University of Maryland, College Park **Databases Lab**  
*Advisor:* Prof. Amol Deshpande  
Full-time Graduate Research Assistantship working on the followup research paper for the *GraphGen* Project.

*Large-Scale Graph Extraction from Relational Datasets*

- GraphGen: Efficiently and intuitively extracting graphs from relational data using a custom Domain Specific Language based on Datalog. This allows users to conduct in-memory large-scale graph analytics on their relational datasets without the need for migrating to a native graph database

*Undergraduate Researcher* Oct. 2012 - Sept. 2013  
Athens University of Economics and Business  
*Thesis Title:* “**Graph Databases and Big Data : Study, Overview of Existing Systems, and Sub-Graph Matching Queries Algorithm Implementation using Apache Hama Graph-Parallel Processing Framework**”  
*Supervisor:* Prof. Yannis Kotidis

**PUBLICATIONS** *Demonstrations*

- Konstantinos Xirogiannopoulos, Udayan Khurana, Amol Deshpande  
**GraphGen: Exploring Interesting Graphs in Relational Data**  
*VLDB 2015*

<b>INDUSTRIAL EXPERIENCE</b>	<b><i>Back-End Software Engineer Intern</i></b> <b>March 2014 - June 2014</b> Asuum GmbH based in Berlin, Germany Developed for asynchronous inter-server communication, data management, data analysis and web application back-end maintenance. <i>Technical Skills:</i> Java, Hadoop, Map-Reduce, MongoDB, ElasticSearch, Jenkins
<b>TEACHING &amp; MENTORING</b>	<b><i>Graduate Teaching Assistant (Teaching)</i></b> <b>Sept. 2014 - Dec. 2014</b> <i>Course:</i> CMSC132: Object Oriented Programming II <i>Instructor:</i> Larry Herman Conducted four 1-hour long discussion sections per week (approx. 35 students per section) and held 4-hours of office-hours every week for answering questions. These discussion sections included explaining concepts, doing worksheets, assigning and grading quizzes. Graded quizzes and actively participated in grading of midterms and final exams.
<b>RECENT COURSES</b>	<b><i>CMSC818:Distributed and Cloud Based File Systems</i></b> <b>Sept. 2014 - Dec. 2014</b> <i>Instructor:</i> Prof. Peter Keleher  <i>Built Distributed Fault Tolerant, Durable File System from Scratch:</i> Starting from a simple in-memory file system implementation, made it persistent, and later applied and implemented distributed file systems concepts like versioning, replication and distributed consensus (Raft) and developed a fully functional, distributed file system with many guarantees. All development done in <i>Go</i> (“A”).  <b><i>CMSC723:Computational Linguistics I</i></b> <b>Sept. 2014 - Dec. 2014</b> <i>Instructor:</i> Prof. Hal Daume III  <ul style="list-style-type: none"> <li>• Konstantinos Xirogiannopoulos, Kasia Hitczenko  <i>Automatic Quiz-bowl Question Answering:</i> Built a classifier that classified text quiz-bowl questions to their correct answers in an automatic way. Text processing done in <i>Python</i> (“A+”).</li> </ul> <b><i>CMSC 724: Database Management Systems</i></b> <b>Feb. 2015 - May. 2015</b> <i>Instructor:</i> Prof. Amol Deshpande  <ul style="list-style-type: none"> <li>• Konstantinos Xirogiannopoulos, Benjamin Bengfort  <b>Graph-Based Machine Learning on Relational Data</b> (“A+”).</li> </ul> <b><i>CMSC 734: Information Visualization</i></b> <b>Feb. 2015 - May. 2015</b> <i>Instructor:</i> Prof. Ben Schneiderman  <ul style="list-style-type: none"> <li>• Konstantinos Xirogiannopoulos, Myco Paulo, Zheng Xu, Deok Gun Park  <b>TimeGrouper: Visualizing Time Series Clustering Towards the Identification of the Contributing Factors to the Global Decay Rate of Vulnerabilities</b> (“A”) <i>[video demo]</i></li> </ul>
<b>HOBBIES &amp; INTERESTS</b>	<i>Music</i> (Electric & Acoustic Guitar), <i>Sports</i> (Basketball [participation in town tournaments] , Swimming, Skiing), <i>Leisure</i> (Fishing, Cinema, Android OS Enthusiast, Rubiks Speedcubing [national contest participation])