

# Konstantinos Xirogiannopoulos

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3226 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**  
*Ranked in the top 7.5% of graduates in past five years* Athens University of Economics and Business

**HONORS & AWARDS**

- 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* **Summer 2015**  
*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*

**INDUSTRIAL EXPERIENCE** *Back-End Software Engineer Intern* **March 2014 - June 2014**  
*Asuum GmbH based in Berlin, Germany*  
Developed for asynchronous inter-server communication, data management, data

analysis and web application back-end maintenance.

*Technical Skills:* Java, Hadoop, Map-Reduce, MongoDB, ElasticSearch, Jenkins

## TEACHING & MENTORING

### ***Graduate Teaching Assistant (Teaching)***

**Sept. 2014 - Dec. 2014**

*Course:* CMSC132: Object Oriented Programming II

*Instructor:* 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.

## RECENT COURSES

### ***CMSC818:Distributed and Cloud Based File Systems*** **Sept. 2014 - Dec. 2014**

*Instructor:* Prof. Peter Keleher

*Built Distributed Fault Tolerant, Durable File System from Scratch:* Starting from a simple in- memory file system, made it persistent, and later applied and implemented distributed file systems concepts like versioning, replication and distributed consensus (Raft) and developed a fully functional, large-scale distributed file system with many guarantees. All development done in *Go* (“A”).

### ***CMSC723:Computational Linguistics I***

**Sept. 2014 - Dec. 2014**

*Instructor:* Prof. Hal Daume III

*Automatic Quiz-bowl Question Answering:* Built a classifier that classified text quiz-bowl questions to their correct answers in an automatic way. Text processing done in *Python* (“A+”).

### ***CMSC 724: Database Management Systems***

**Feb. 2015 - May. 2015**

*Instructor:* Prof. Amol Deshpande

- **Graph-Based Machine Learning on Relational Data** (“A+”).

### ***CMSC 734: Information Visualization***

**Feb. 2015 - May. 2015**

*Instructor:* Prof. Ben Schneiderman

- Konstantinos Xirogiannopoulos, Myco Paulo, Zheng Xu, Deok Gun Park  
**TimeGrouper: Visualizing Time Series Clustering Towards the Identification of the Contributing Factors to the Global Decay Rate of Vulnerabilities** (“A”)

## HOBBIES & INTERESTS

*Music* (Electric & Acoustic Guitar), *Sports* (Basketball [participation in town tournaments] , Swimming, Skiing), *Leisure* (Fishing, Cinema, Android OS Enthusiast, Rubiks Speedcubing [national contest participation])