Amir R. Ilkhechi

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Education

- **Brown University – @Providence** — Rhode Island, United States
  Doctor of Philosophy in Computer Science — *June. 2017 – Present*
  - Key Courses: Deep Learning, Computational Linguistics, Foundations of Prescriptive Analytics
  - Current Research Interest: Database Systems Interfaces, Data Mining, Machine Learning applications in Databases

- **Duke University – @Durham** — North Carolina, United States
  Master of Science in Computer Science — *Aug. 2014 – 2017*
  - Key Courses: Advanced Computer Networks, Advanced Operating Systems, Numerical Analysis, Distributed Information Systems
  - Main Research Focus: Big Data Processing Platforms, Distributed Systems, Cloud Computing

- **Bilkent University – @Ankara** — Ankara, Turkey
  Master of Science in Computer Engineering — *Aug. 2012 – Jul. 2014*
  - Key Courses: Wireless and Mobile Networking, Cryptography and Network Security, Switching Networks, Data Management Systems, Information Retrieval Systems, Computational Geometry
  - Main Research Focus: Cloud Computing

- **University of Tabriz – @Tabriz** — East Azerbaijan, Iran
  Bachelor of Science in Information Technology — *Sep. 2007 – Aug. 2011*
  - Key Courses: Digital Electronics, Computer Architecture, Operations Research, Logic Curcuits, Multimedia Systems, Distributed Systems, Computer Networks, Computer Simulations
  - Cumulative GPA: 16.05/20 (A-)
  - Last four semesters GPA: 17.01/20 (A)
  - Rank of GPA in the class of 2007: 5/57

Teaching Experience

- **Introduction to Computer Science (TA)** — Duke University, US
  COMPSCI101, Computer Science Department — *Jan. 2015 – May 2016*
  - Grading assignments and exams, office hours.

- **Data Structures (TA)** — Bilkent University, Turkey
  CS102, Computer Engineering Department — *Jan. 2014 – Jun. 2014*
  - Grading assignments and quizes, giving lectures, and proctoring exams.

- **Operating Systems (TA)** — Bilkent University, Turkey
  CS342, Computer Engineering Department — *Jan. 2014 – May. 2014*
  - Grading assignments and projects.

- **Computer Networks (TA)** — Bilkent University, Turkey
  EE421, Department of Electrical and Electronics Engineering — *Jan. 2013 – May. 2014*
  - Designing and grading projects.

- **Java Programming Lab (Instructor)** — Bilkent University, Turkey
  (CS101, CS102, CS114), Computer Engineering Department — *Sep. 2012 – Jun. 2014*
  - Preparing lab questions, grading, and lab administration.

Publications

- **Amir Rahimzadeh Ilkhechi**, Ibrahim Korpeoglu, Özgür Ulusoy, "Network-aware virtual machine placement in cloud data centers with multiple traffic-intensive components", *Computer Networks*, Volume 91, 14 November 2015, Pages 508-527, ISSN 1389-1286, http://dx.doi.org/10.1016/j.comnet.2015.08.042

- **Amir Rahimzadeh Ilkhechi**, Ibrahim Korpeoglu, Uğur Güdükbay, Özgür Ulusoy, "PETAL: A Fully Distributed Location Service for Wireless Ad-hoc Networks", *Journal of Networks and Computer Applications* (accepted on Jan. 20, 2017)
- **Amir Ilkhechi**, Michael Mao, Alex Galakatos, Andrew Crotty, Ugur Cetintemel "DeepPress: A deep semantic compressor for relational databases", *under preparation*
- Prasetya Utama, Nathaniel Weir, Fuat Basik, Carsten Binnig, Ugur Cetintemel, Benjamin Httasch, **Amir Ilkhechi**, Shekar Ramaswamy, Arif Usta, "An End-to-end Neural Natural Language Interface for Databases", *submitted to SIGMOD 2019*
- Fuat Basik, Benjamin Httasch, **Amir Ilkhechi**, Arif Usta, Shekar Ramaswamy, Prasetya Utama, Nathaniel Weir, Carsten Binnig, and Ugur Cetintemel. 2018. DBPal: A Learned NL-Interface for Databases. *In Proceedings of the 2018 International Conference on Management of Data (SIGMOD '18).*

Computer Skills

- Programming Languages in the order of proficiency: Java, Python, Scala, C++, C#, C, Kotlin
- Modeling Frameworks and Simulation Tools: NS3, JavaSim, CPN Tools for Colored Petri Nets, Slam, Quartos
- Word Processor: LaTeX, Microsoft Office Word.
- Operating Systems: Linux, Macintosh, Windows
- Database Management System: SQL Server, Oracle, PostgreSQL, MySQL
- Web design: ASP.NET, PHP, HTML5.
- Distributed Computing: Hadoop, Spark, OpenStack.
- Hardware Virtualization: VMWare, Xen, KVM, VirtualBox.
- Networking: Network+, Server+, MCITP, CCNA, CCNP, CCDA, OpenFlow, Beacon.

Research Interest

Major: Database Systems, Data Mining and Knowledge Discovery, Applications of Machine Learning on Databases, Distributed Systems

Minor: Deep Learning, Computer Networks, Graph Theory.

Language Skills

Turkic (Azerbaijani & Turkish):   Mother tongue.

English: Fluent.

Persian: Bilingual Native.

Arabic: Basic Understanding.

Academic References

- **Dr. Ugur Cetintemel (PhD Advisor)**   Brown University, USA
  Professor, Computer Science Department   *ugur@cs.brown.edu*
- **Dr. İbrahim Körpeoğlu (MS Advisor)**   Bilkent University, Turkey
  Associate Professor, Computer Engineering Department   *korpe@cs.bilkent.edu.tr*
- **Dr. Özgür Ulusoy (MS Co–advisor)**   Bilkent University, Turkey
  Professor, Computer Engineering Department   *oulusoy@cs.bilkent.edu.tr*
- **Dr. Öznur Taştan**   Bilkent University, Turkey
  Assistant Professor, Computer Engineering Department   *oznur.tastan@cs.bilkent.edu.tr*
- **Dr. Uğur Güdükbay**   Bilkent University, Turkey
  Professor, Computer Engineering Department   *gudukbay@cs.bilkent.edu.tr*