Haluk Dogan

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EDUCATION

- **University of Nebraska-Lincoln** — Lincoln, NE
  Doctor of Philosophy in Computer Science, (PhD Candidate) — *August 2018 – May 2020 (Expected)*
- **Bogazici University** — Istanbul, Turkey
  Master of Science in Computer Engineering — *September 2011 – June 2013*
- **Istanbul Bilgi University** — Istanbul, Turkey
  Bachelor of Science in Computer Science — *September 2006 – June 2010*

EXPERIENCE

- **University of Nebraska-Lincoln** — Lincoln, NE
  Teaching and Research Assistant — *Aug 2018 – Present*
  - **Teaching**: I am the head TA of **"Introduction to Data Mining"** and **"Python Programming for Data Science"** courses offered to undergraduate and graduate students. I led recitations, lab sessions, and graded weekly assignments.
  - **Research**: I work on machine learning with focus on graphical models and Bayesian statistics. I have 9 journal, conference, book chapter, and preprint publications. I develop my programs for my research in **Python, R**, and **Java**. I use various third-party programming libraries including but not limited to **TensorFlow** and **Scikit-learn**. I use **Git** and **Docker** to share my programs and environment for reproducibility. I use UNL's supercomputers and **GCP**.
- **Roomkita** — Istanbul, Turkey
  Co-founder — *Aug 2013 – Present*
  - **Developer**: I helped to develop the website in **Django**. I also implemented a **machine learning** module to amend search results. The company is featured in **tnooz**, a global provider of news related to travel technology.
- **Istanbul Bilgi University** — Istanbul, Turkey
  Teaching Assistant — *Nov 2010 – Aug 2013*
  - **Teaching**: I was the head TA of programming, taught in **Scheme**, probability and statistics courses. I led lab sessions and graded quizzes, assignments and exams.
  - **Software Developer**: I helped to build the engineering faculty website. Website was in **Wordpress** but I made customizations in **PHP** to the CMS and the theme according to our needs.
- **i2i Systems** — Istanbul, Turkey
  Software Developer — *Mar 2010 – June 2010*
  I developed a command-line **Java** program for PL/SQL developers in the company. Business analysts were preparing the billing rules in spreadsheets. Spreadsheets were unstructured and contained references. Therefore they were not suitable for parsing them as a delimited file. I built the grammar of billing rules using **JavaCC** and developed its parser. I used **Spring Framework** and **Hibernate** to insert rule formulas as a text into the respected database tables. I used **Maven** to create a jar file of my program. I also create a **cron** job to run my program in a regular basis.
- **GNA** — Istanbul, Turkey
  Data Scientist — *Aug 2009 – Mar 2010*
  My responsibilities were data staging, data cleaning, and prepare weekly reports. I used **SQL, Oracle SQL Developer** in my daily routine tasks.
- **Aradiom** — Istanbul, Turkey
  Software Developer — *Mar 2008 – Jun 2008*
  I designed and implemented backend/frontend regex editor to create cron jobs. This was designed for non-technical users. I used **JBoss Seam Framework**.

PROJECTS

- **Side Projects**: Implemented and designed a distributed application that sends SMS messages by connecting to SMSC via SMPP by using **Apache Thrift RPC Framework**
- **Course Projects**: Machine learning algorithms, IO-efficient algorithms, string matching algorithms, data compression algorithms

PROGRAMMING SKILLS

- **Languages**: Java, Python, R, Clojure, Lisp, Scheme, SQL
- **Technologies**: Git, Docker, Maven, Leiningen, Make, Linux, AWK, sed, Emacs