

Muhammed Yavuz Nuzumlalı

New Haven, USA
+1 (203) 508-2365
yavuz.nuzumlali@yale.edu
manuyavuz.github.io

SUMMARY I am a Ph.D. student at Yale University focused on Natural Language Processing (NLP) Machine Learning (ML) domains as well as being an open-source software contributor.

EDUCATION **Yale University,** **New Haven, U.S.**

- *Ph.D. in Computer Science,* August 2017 - Present
– Advisor : Dragomir Radev
- *M.S. in Computer Engineering,* September 2011 - January 2015
– Thesis : Analyzing Stemming And Sentence Simplification Methodologies For Turkish Multi-Document Text Summarization
– Advisor : Arzucan Özgür
- *B.S. in Computer Engineering,* September 2006 - June 2011

PUBLICATIONS Nuzumlalı, M. Y., & Özgür, A. (2014). Analyzing Stemming Approaches for Turkish Multi-Document Summarization. *In Proceedings of the 2014 Conference on Empirical Methods in Natural Language Processing (EMNLP)* (pp. 702-706)

THESIS Nuzumlalı, M. Y.. Analyzing Stemming And Sentence Simplification Methodologies For Turkish Multi-Document Text Summarization. *2015, M.S. Thesis*

TECHNOLOGY SKILLS *Proficient* : Objective-C, Python
Competent : Ruby, Java
Familiar : C++, C, Swift, Perl, MATLAB, Octave

RESEARCH EXPERIENCE *Ph.D. Student at Yale University* **August 2017 - Present**

- Developing NLP models to understand unstructured Electronic Health Records (EHR) data.

Ph.D. Student at Bogazici University **January 2016 - August 2017**

- Performed research on online matrix factorization techniques and their usage on the analysis of time series data.
- Worked on a research project on developing efficient Monte Carlo methods for large scale matrix and tensor factorization problems. Study was supported by a scholarship from Scientific and Technological Research Council of Turkey (TÜBİTAK).

M.S. Student at Bogazici University **September 2011 - January 2015**

- Developed the first Multi-Document Summarization (MDS) system for Turkish.
 - Created the first public multi-document summarization dataset for Turkish.
 - Analyzed in-detail the effects of using different stemming policies on summary quality. This study is accepted to EMNLP 2014 conference.
- Developed the first sentence simplification system for Turkish.
 - Applied simplification as a preprocessing step in MDS problem, analyzed the effects on summary quality.
 - Working on applying simplification to Machine Translation (MT) problem.

Member of AILab at Bogazici University

June 2010 - June 2011

- Attended to RoboCup Rescue Simulation League with RoboAKUT team. We became the 5th best team in the competition.
- Proposed and implemented a bidirectional A* search algorithm for searching of humans by agents in the competition. The new algorithm improved the average search time complexity by approximately 50%.

PROFESSIONAL *Senior Software Engineer* at Inomera Research January 2013 - Present
EXPERIENCE

- *Lead Machine Learning Engineer at Netmera*
 - Led the research project, which aims to automatically analyze huge amount of user behavior data collected from mobile applications, and make inferences and recommendations with the help of ML and NLP techniques. Following are a few good recommendation cases which we continue to work on them:
 - * Selecting the audience automatically for a campaign to be delivered. Audience will contain the most likely ones to engage with the campaign.
 - * Clustering people dynamically according to their behaviors and personal attributes and automatically proposing a campaign message and content for a particular cluster according to their common interests.
- *Technical leader of the iOS team*
 - Rewrote the Netmera iOS SDK from scratch, which will be open sourced once completed. It has great test coverage, and all testing and deployment process is automated via continuous integration.
 - Responsible for mentoring engineers, reviewing codes, deciding code standards, assuring best practices are followed.
- Led the company during the adoption of software development standards like code reviewing, testing, maintaining coverage, continuous integration, continuous delivery, and automatic code analysis.
- Pioneered the migration from central version control systems like *CVS* and *Subversion* to *git* in the whole company.

***iOS Developer* at Arneca Technology**

July 2011 - January 2013

- Developed a few interactive magazine applications, an EPUB reader application, and a template application used to robustly publish 30+ applications for different events organized around the world.

OPEN SOURCE EXPERIENCE *Core Team Member at CocoaPods* **October 2015 - August 2017**

- Reduced “pod search” command’s response time for full text search by 90% by implementing an inverted document index for search.
- Actively contributing to the project by adding new features and fixing issues reported by users.

CERTIFICATES *Coursera*

- Machine Learning (Stanford University) April 2015
- Mining Massive Datasets (Stanford University) March 2015

OTHER SKILLS *Spoken Languages*

- Turkish (Native)
- English (Proficient)

REFERENCES *Arzucan Özgür, Assistant Professor*

Department of Computer Engineering
Bogazici University
+90 (212) 359 72 26, arzucan.ozgur@boun.edu.tr

Dragomir Radev, Professor

Department of Computer Science
Yale University
+1 (203) 436-4759, dragomir.radev@yale.edu

Ahmet Başaran, CTO

Inomera Research
+90 (533) 573 52 94, ahmet.basaran@inomera.com