

CONTACT INFORMATION	E-mail: aladagemre@gmail.com
WEB PAGES	Personal Site: http://www.emrealadag.com Projects: http://www.emrealadag.com/projects Linkedin: http://www.linkedin.com/in/ahmetemrealadag Github: http://github.com/aladagemre
INTERESTS	Artificial Intelligence, Prompt Engineering, Software Architecture Design, Backend Development, Data Science, Text Mining, ChatBots
SKILLS	Experience: Python, Django, FastAPI, Celery, React, Next.js, OpenAI API, Groq, Scikit-learn, Pandas, NetworkX, Matplotlib, R, HTML5, JavaScript, CSS, MySQL, Redis, Java GIT, Linux, OSX, Docker, Heroku, JIRA, $\text{\LaTeX}$ Familiarity: Redux, Node.JS, Vue.js, C, Crystal, Go, MongoDB
LANGUAGES	Turkish : Native Speaker English : Fluent - TOEFL iBT: 108 (R29 L26 S26 W27) Spanish : Beginner German : Beginner
EXPERIENCE	Harmonytics OÜ, Tallinn, Estonia (Remote) <i>Founder</i> October 2018 – Present • Suicidal Ideation Detection (Text Mining, Scikit-learn) • Personality Disorder Detection (Embeddings) • Castelect.com: Recruitment Platform for entertainment industry (Python/Django) • Psikas: AI Chatbots for Psychology Clinics (OpenAI, Grok, FastAPI, Embeddings) BP, London, UK (Remote) <i>Data Engineer in the Center of Excellence</i> February 2022 – February 2024 • Tech Stack: Python, PySpark, AWS Glue, S3, DynamoDB, CloudFormation • Led data engineering initiatives to enhance software quality. • Established and promoted data engineering best practices. • Developed and maintained a Python package with extensible classes and utility functions for data engineering, now widely used across multiple teams at BP. • Streamlined data pipeline development, resulting in more than 50% reduction in development time and number of bugs. • Implemented testing for data pipelines, increasing code coverage. Encouraged colleagues to do so. • Authored and enhanced documentation for improved knowledge sharing. • Provided guidance and mentorship to fellow data engineers. Toptal (Remote) <i>Freelance Backend Developer</i> October 2021 – December 2021 • Backend development with Python/Django for a healthcare project

Doist.com (Remote).

Software Engineer

November 2018 – March 2020

- Backend development for Twist.com team communication software.
- Stack: Python, MySQL, Redis, AWS
- Apple Sign-in for Twist and Todoist
- Slack Importer for Twist
- Closing Threads for Twist
- Email Confirmation for Twist
- Code Maintenance for Twist

Amazon.com, Madrid, Spain.

Software Development Engineer II

July 2017 – November 2018

- Amazon Business Checkout / Orders
- Gathered business requirements, prepared Business Requirements Document.
- Designed and iterated software architecture
- Involved in implementation and documentation
- Created tools for reducing operational workload
- Proposed and prepared PoC for a Machine Learning System for detecting responsible teams for incoming customer tickets.

Fikrimahal Teknoloji, İstanbul, Turkey.

R&D Engineer on HiveCDN

October 2015 – March 2017

- Stack: Scala, Akka, Play, React, NodeJS, ES6, RxJs, Python, WebRTC
- Worked on [HiveCDN](#) (P2P supported CDN) project.
- Designed architecture and algorithms.
- Developed backend and frontend with microservice architecture.
- Prepared grant proposals for government fundings.
- Built Continuous Integration and Deployment infrastructure.

Universal Bilgi Teknolojileri, İstanbul, Turkey.

R&D Consultant

April 2015 – September 2015

- Prepared R & D Project proposals
- Performed UX Design

AGMLab, İstanbul, Turkey.

R&D Engineer

February 2013 – September 2013

- Led Link Analysis Team of Turkish Search Engine running on a cluster of 100+ servers.
- Implemented Graph-based distributed ranking algorithms ([Giranking](#)) with Apache Giraph and performed their integrations to Apache Nutch, Solr and HBase.
- Developed proxy and sync mechanism of BuluttDepo (Dropbox-clone) desktop application for Türk Telekom.

Woramo

Co-Founder, Software Lead

August 2011 – October 2013

- Woramo is a social network for sharing product/service reviews online. Friends can ask each other's opinion about a product or service over social networks. Users can share what they like and dislike and build wish lists. Those lists can be used to find gifts for friends. Members can also post questions about products and services, which can be answered by other community members.
- Stack: Python, Django, MySQL, Redis, Celery, Memcached, ElasticSearch, Nginx, Jenkins.

Kadir Has University Computer Engineering Department

Research Fellow (funded by TÜBİTAK)

September 2009 – August 2011

Developed a tool for performing analysis, visualization and verification of Protein-Protein Interaction Networks with respect to Co-Ontology and Co-Expression concepts.

Project: Robinviz (Reliability Oriented Bioinformatic Network Visualization)

Supervisor: Prof. Dr. Cesim Erten

Teaching Assistant

September 2009 – June 2011

- Gave crash Python Course to Introduction to Computational Biology class.
- Gave crash Java Course to Data Structures and Algorithms class.
- Performed exam, homework, project grading on Discrete Mathematics, Data Structures and Algorithms, Analysis of Algorithms and Introduction to Computational Biology courses.

STARTUP EX

”Launching a Successful Software Startup” course by Emrah Yalaz in Boğaziçi University covering Lean, Agile, Scrum methodologies.

EDUCATION

Boğaziçi University, İstanbul, Turkey

2011 - 2025 (Expected) : PhD., Computer Engineering (3.56/4.00)

Thesis Topic: Predicting psychological attributes from user-generated content

Stack: Python, scikit-learn, nltk, pandas

Supervisor: Prof. Dr. Haluk Bingöl & Assoc. Prof. Arzucan Özgür

Kadir Has University, İstanbul, Turkey

2009 - 2011 : M.Sc., Computer Engineering (4.00 / 4.00)

Thesis Topic: Visualization of Protein-Protein Interaction Networks

Supervisor: Prof. Dr. Cesim Erten

Carleton University, Ottawa, ON, Canada

January 2009 - April 2009: B.Sc. Exchange, School of Computer Science

Işık University, İstanbul, Turkey

2005 - 2009 : B.Sc., Computer Science & Engineering (3.74 / 4.00)

PUBLICATIONS

A. E. Aladağ, S. Muderrisoglu, N. B. Akbas, O. Zahmacioglu, H. O. Bingol. Detecting Suicidal Ideation on Forums: Proof-of-Concept Study, J Med Internet Res 2018;20(6):e215.

A. E. Aladağ. ”İstanbul Toplu Taşıma Ağı Analizi (Istanbul Public Transportation Network Analysis)”, Akademik Bilişim Konferansı, 2016.

A. E. Aladağ, C. Erten. ”SPINAL: scalable protein interaction network alignment.”, Bioinformatics 29.7 (2013): 917-924.

A. E. Aladağ, C. Erten, M. Sözdinler, ”Reliability Oriented Bioinformatic Networks Visualization”, Bioinformatics, vol 27, pp. 1583-1584, 2011.

A. E. Aladağ, C. Erten, M. Sözdinler, ”An integrated model for visualizing biclusters from gene expression data and PPI networks”, Proc. International Symposium on Biocomputing, no.24, 2010.

ACHIEVEMENTS AND AWARDS	Boğaziçi University	
	• TÜBİTAK PhD Fellowship	2011 – 2016
	Kadir Has University	
	• Full tuition award	2009 – 2011
	Işık University	
	• Ranked 2nd among 60 CSE Students	2009
	• Fellowship for Oracle DBA Training from Bilginç IT Academy.	2008
	• Full tuition award	2005 – 2009
PRESENTATIONS AND SEMINARS GIVEN	• Microservice Architecture with Docker and Apache Mesos, FOSS and Linux Days, 2016.	
	• Introduction to Machine Learning, Data Science Istanbul, 2016.	
	• Python and Linux Seminar at Karabük University in 2014.	
	• Linux Seminars between 2007 and 2014 to 500 people in total.	
	• Intensive Python Trainings in 2008 and 2011.	
COURSEWORK IN FIELD	Undergraduate Courses Taken: Data Structures, Analysis of Algorithms, Computer Graphics, Operating Systems, Computer Organization, Principles of Programming Languages, Database Systems, Software Engineering, Computer Networks, Bioinformatics, Applied Cryptography, Engineering Statistics, Game Theory, Robotics, Automata Theory, Technology Entrepreneurship	
	Graduate Courses Taken: Parallel Programming, Systems Programming, Operating Systems, Data Mining and Warehousing, Design and Analysis of Algorithms, Client and Server Side Web Programming, Engineering Optimization and Algorithms, Complex Networks, Social & Semantic Web, Artificial Intelligence, Evolutionary Dynamics, Computational Biology & Bioinformatics, Brain Dynamics, Biostatistics, Pattern Recognition, Information Retrieval	
	Independent Coursework: MITx - The Analytics Edge (Data Science)	
HOBBIES AND INTERESTS	Functional Medicine, Healthy Living, Personal Growth, Productivity Techniques, Blogging, Electronics, Gardening, Traveling, Photography	