

Ferhat Elmas

Passionate Developer

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EDUCATION

Master of Science, Computer Science, with Internet Computing Specialization
School of Computer and Communication Sciences
Swiss Federal Institute of Technology in Lausanne(EPFL), Switzerland
Thesis: "New Storage System for Indico, Event Management at CERN"
Semester Project: "Nokia Mobile Data Challenge - Demographic Attributes"
Extra Project: "Squall, Online Query Processing Engine on top of Twitter Storm"

Bachelor of Engineering, Computer Engineering
Faculty of Engineering
Bogazici University, Istanbul, Turkey
Thesis: "Social Analysis on DeviantART"

EXPERIENCE

Software Developer, Open Source

Indico Software @ CERN Geneva, CH

Mar 13 - Sep 14

- Design and implementation of highly scalable and extensible polyglot storage system
- Integrated MVC design pattern to modularize code base by utilizing of bulk changes in storage system architecture
OODBMS (ZODB) → **RDBMS** (PostgreSQL) + **NoSQL** (Redis+MongoDB)
- Python 3 port

Committer, Open Source

Community Software Lab Massachusetts, USA

Jun 11 - Feb 12

- Transition of social service search engines mvhub.com and northshoreport.org to MVC pattern for easier development and maintenance
- Custom ORM to provide backend agnostic storage system which enables plug and play between different DBMSs
- Restructure of schema for normalization (DRY), performance (to reflect usage patterns better) and tools (to use new features of DBs).

Software Developer Part time

Bogazici University Civil Engineering Department Istanbul, TR

Mar 11 - Jun 11

- *Traffic Simulator* to test the performance of the congestion/incident detection algorithms, devised by Civil Engineering department
- Customizable incident detection and load generation plugins for Paramics, full featured simulation tool used by the department

Teaching Assistant

Bogazici University Computer Engineering Istanbul, TR

Feb 11 - Jun 11

- **CMPE 230 - System Programming**
- Helped students to prepare 3 projects and graded them, a minimal log parser for *Apache Web Server*, a command line client for *AWS* and a graphical user interface for *wget*

Software Developer Part time

Pozitron Mobile Istanbul, TR

Aug 10 - Jun 11

- *SessionSwitch Service*, a monitoring tool that keeps track of what developers do on their machines

- kapalidevre.com *digital signage system* that enable customers to prepare custom playlists and to play them on multiple machines at the same time indefinitely. Rejuvenated the desktop client and integrated multiple web services to provide long-time lacking features such as news, weather forecasts, radio, etc.

Software Developer Intern

[Nortel Netas Networks](#) *Istanbul, TR*

Jun 10 - Jul 10

- Market analysis for a mobile SIP client (Palm, BlackBerry, Windows Phone, iOS and Android) and implementation of a very simple prototype in Android

Software Developer Intern

[Pozitron Mobile](#) *Istanbul, TR*

Jan 10 - Feb 10

- *Download Manager*, a web application to serve versions of mobile applications at pre-smart-phone era according to phone specification
- *Server health watcher aka Big Brother*, analytics and emergency recovery tool

Software Developer Intern

[Pozitron Mobile](#) *Istanbul, TR*

Jun 09 - Oct 09

- Implementation of a manager for logs and notifications for mobile banking at [Turkish IsBank](#)
- Domain specific editor for a custom XML-based language, that is used to define the hierarchy of the code written by the company

COMPUTER SKILLS

- Solid background on **data structures**, **algorithms** and **distributed systems**
- Experienced developer on **Linux** environment
- **Proficient in Java** and experienced in **Scala**
- Mostly drives **Python/Ruby/Perl** but also productive in **C/C++/Go** and indispensable **JavaScript**
- Loves experimenting with languages such as *Haskell, Io, Julia, Prolog, Racket, Rust, Scheme, SML*
- Used to use **SVN** but now completely leverages **Git**
- Experienced in **RDBMSs (PostgreSQL/MySQL)**, knowledgeable in many **NoSQL products (MongoDB, OrientDB, Redis, etc.)** and was lucky enough to solve some big data problems with *Avro/Hadoop/Kafka/Pig/Storm/Thrift/Zookeeper*
- Industry-proven experience in backend development but actually productive throughout the full stack