## Can Tuksavul

# **Professional Experience**

#### 09/2017 - Current Independent Software Consultant

- Own products:
  - Multilanguage chat-bot built with Microsoft Bot Framework. Developed reporting tool with Node.js Express backend and front-end with Ag-grid and React to be used by the customers.
- Fibabanka Consultancy:
  - Back-office GUI modernization/conversion from Java Swing rendered declarative XML to React.
  - Developed a responsive legal document approval application with React and PrimeReact that is used by 100K customers in 4 months.
  - In-house business process management application development support using Kendo UI and .NET MVC
  - In-house call center J2EE application development with Java SWT, OSGI and its integration with Microsoft Dynamics CRM.

## 08/2016 - 05/2017 Alterna-Team – Software Engineer

Alterna-Team provides customer experience management service through strategic consultancy supported by online, real-time, integrated, omni-channel surveying, reporting and analytics software named Alterna CX Platform. <a href="https://www.alterna-team.com">www.alterna-team.com</a>

- Worked as Fullstack Developer with a group of 4 on Alterna CX Platform to:
  - document, design and develop new features,
  - automate integrations, deployment and build processes,
  - configure, test and deliver final product to 3 customers: Sompo Japan Turkey, Akbank and Zubizu
- C# .NET Web API backend development with CQRS architecture using OData, Simple Injector, Entity Framework, T-SQL, Hangfire, SqlBuilder, DbUp
- Javascript Single Page Application development with AmpersandJS(variant of Backbone.js), Materialize and Stylus CSS, AMCharts, D3.js, JQuery, Lodash.
- Version Management with Git(Github, Git Flow), Deployment to Azure Cloud and MS Server.

## 08/2012 - 08/2016 Vestel Electronics DTV Group - Senior Software Engineer - Tech Lead

Vestel is an electronic appliance manufacturer which holds a significant market share in Europe. Digital Television Group focuses on researching and developing television-Vestel's mothership product- software and electronics. www.vestel.com

- Worked as Embedded C++ Linux application developer and Front-end developer. Successfully lead 3 teams of size 5, took part in 3 teams of size 7, worked with 4 different platforms, 2 different SoC producers, 3 3rd party software vendors.
- Integrated Opera TV Browser Linux SDK. Developed HTML GUI for the in-app internet browser.
- Created a new business logic abstraction layer C API to support OIPF and HbbTv standards that allow 3<sup>rd</sup> party applications to allow the use of standard TV functionalities from browser applications.
- Lead GUI development with Angular JS Framework for the next generation human-computer

- interaction. Tasked to choose among different candidate frameworks and went ahead with creating a boilerplate with Grunt build, RequireJS AMD, LESS CSS.
- Lead main code base upgrade, cleanup and maintanance. Continuous integration and testing with Python, Buildbot, CCache, Distcc. Project Management via JIRA, Version Management via SVN
- Lead B2B Digital Signage product development. Developed HTTP/s downloader with Curl Multi and an SDK with NPAPI plugins to be used with 3<sup>rd</sup> party and in-house web applications.

## 08/2010 - 10/2010 Microsoft Turkey - SMS&P Data Management Intern

• Generating piracy threat reports based on purchase patterns using Reporting Services, ASP.NET Web Forms and MSSQL.

## 08/2009 - 09/2009 Netsis Yazılım - Internet Services Specialist

• Creating a Testing System using JSP and MySQL

## **Education**

#### 2014-2017 Software Engineering Msc., Bogazici University

- <u>Finishing Project: Turkish Social Media Sentiment Analysis</u>. Supervised learning with Java OpenNLP, Zemberek-nlp, Weka using word and character N-grams on normalized Turkish text.
- Machine Learning: Supervised and Unsupervised Learning methods, Bayesian Linear models, Gaussian Process theory. Developed proof-of-concept applications with GNU Octave(variant of MATLAB) and with Python using scipy, numpy and matplotlib libraries.
- <u>Network Programming</u>: Internet layers and network architecture theory, Python threaded socket programming to create P2P Backgammon game.
- <u>Systems programming</u>: Solved Producer-Consumer problem with C, using Unix shmem and Sys-v IPC.
- Web Application Programming:
  - Personal Health Tracker with Python Flask, SqlAlchemy, MySql for backend and Angular2-Webpack-PrimeNg-Karma-Protractor-Material CSS for frontend.
  - Medical Clinic Automation using MEAN(AngularJs 1.5) Stack and custom OAuth 2.0 authorization.
  - Cultural Heritage Wiki with Annotation web standard using Java Spring Boot and Angular2/SystemJs
- Other: Software Requirements Engineering, Software Design Process, Software Project Management, Software Quality Assurance and Reliability

# 2007-2012 Computer Science Bs., Bilkent University

- <u>Finishing Project</u>: Online Newspaper Productline Software development in collaboration with Bor Yazilim using Wordpress Multi and Wordpress plugins.
- <u>Network Programming</u>: Internet layers and network architecture theory, C socket programming, Java HTML crawler application development.
- <u>Cryptography</u>: Public-private key theory and attacks. Created a secure chat application with Java that uses signed certificates issued from Virtual Certificate Authority and RSA to establish AES key between peers.
- Parallel Computing: Multicore CPU architectures, Complexity analysis of parallel algorithms.

Developed multicore matrix calculator with C using MPI(Non-uniform memory access), OpenMP(Uniform memory access).

- <u>Operating Systems</u>: Multithread programming with C POSIX. Ext3 filesystem implementation.
- <u>Programming Languages</u>: Creating a context-free grammer with Lex and Yacc.
- Other: Principles of Graphical User Interface Design, library automation software with ASP.NET Web Forms and MSSQL, Xlinx FPGA application development with Verilog, Processor design and implementation with MIPS Assembly Language, 8051 assembly programming

2003-2007 Bornova Anatolian Highschool – English - Science and Math

## **Technical Skills:**

Language	Libraries
C, C++	POSIX threading and locks, Curl Multi, Sys-v IPC, Unix shmem, OpenMP, MPI, C Sockets
Javascript	React, Redux, RxJs, Reselect, ImmutableJs, AngularJs, Angular,
	AmpersandJs, BackboneJs, JQuery, Lodash, AMCharts, D3.js, RequireJs,
	SystemJs, Webpack 2, Grunt, Node.js, Express.js, Mongoose.js, React
	Material UI, PrimeNg, PrimeReact
Python	Threading, Sockets, Flask, SqlAlchemy, nltk, scipy, scikit-learn, conda
C#	OData, Simple Injector, Entity Framework, Hangfire, SqlBuilder, DbUp, MVC
Java	Threading, Sockets, Spring Boot, OpenNLP, Weka, Security, SWT
CSS	Less CSS, Stylus CSS, Materialize CSS, Bootstrap
SQL	MySql, MSSQL, T-SQL
NoSql	MongoDB

Software Tools: Git, SVN, JIRA, GDB, Bourne Shell, Make, Azure, AWS EC2

**<u>Languages:</u>** Turkish (Native), English (Fluent)

**Professional Interests:** Full-stack web application development. Interested in learning about Reason, ClojureScript and Golang.

**Extracurricular Interests:** Sailing (Member of Çeşme Sailing Club, BOUN Sailing Club, Bilkent Sailing Club), Playing the drums, Swimming (Bronze Medalist at Local Championship), Turkish Debate (Introduction Speaker for High school Debating Team), Playing Tennis, Basketball and Snowboarding

References from Taylan Cemgil, Associate Professor at Bogazici University Computer Engineering Department, Yusuf Comez, Software Architect at Alterna-Team and Muzaffer Ozakca, Software Architect at Vestel can be provided upon request.