## **Curriculum Vitae**

## **Personal information**

First name / Surname Selçuk Cihan

E-mail selcukcihan@gmail.com

Nationality Turkish

Online profiles <u>linkedin.com/in/selcukcihan, github.com/selcukcihan, selcukcihan, selcukcihan.com, stackoverflow, playstore</u>

**Education** 

Qualification BS. in Computer Engineering @Boğaziçi University

Dates / GPA 01/09/2003 - 01/07/2008 (3.57 / 4)

Research interests Wireless networks and computer vision

Qualification MS. in Computer Engineering @Boğaziçi University

Dates / GPA 01/09/2008 - 01/10/2010 (3.80 / 4)

Title of thesis Parallel maximum flow solver for multi-core machines

Occupational field Software development engineer

Work experience

Role Freelancing Software Development Engineer @<u>Toptal</u>

Main activities and responsibilities Web development using AWS with serverless framework.

Dates 08/2018 –

Role Software Development Engineer @Amazon UK

Main activities and responsibilities Selection Contribution Platform - Amazon's worldwide catalog, a massively large scale system.

Dates 05/2017 - 08/2018

Role Senior Software Engineer @Intertech., intertech.com.tr

Main activities and responsibilities Business process management suite, a web application on which 500K processes are served daily.

Dates 10/2013 – 05/2017

Role Senior Software Engineer @Ziraat Teknoloji, ziraatteknoloji.com

Main activities and responsibilities Developing and supporting workflow engine and document management system of Ziraat Bank.

Dates 06/2011 - 10/2013

Role Embedded Software Engineer @AirTies Wireless Networks, airties.com

Main activities and responsibilities IPTV development in C, with a focus on teletext, closed captioning, subtitles and transport

protocols.

Dates 09/2009 – 12/2010

Employer Software Engineer @CC Yazılım Ltd., www.ccyazilim.com

Main activities and responsibilities Online backup solution development - flagship product of the startup.

Dates 01/2009 – 09/2009

## Skills and competences

Programming languages Java, Python, C, C++, C#, Perl

Miscellaneous Serverless, Kinesis, DynamoDB, SQL, ElasticSearch, AWS, wxPython, scrum, unix, Angular

## Selected work

Catalog orchestration platform

Developed and maintained the orchestration platform that processes Amazon's catalog updates.

The platform is able to handle tens of thousands of TPS, enabling the finest and largest catalog on

earth. Uses Kinesis as the back-bone and routes updates to the catalog to relevant downstream

services.

Relational to NoSQL migration Modelled a relational database backed service onto a NoSQL store. The service had two

implementations for historical reasons and the task included shimming one implementation to the other, mapping from a relational model to a document based model. The migration was carried on

without downtime and around 600 GB of data at rest was migrated offline.

Workflow engine Designed and developed (C#) a workflow engine, workflow designer (WPF) and administration tools. 100K instances flow daily through the engine which is a .Net application with Oracle 10G used

for persistence services.

Online backup

Designed and implemented a cross-platform desktop client and corresponding server. Client is implemented in C++ utilizing wxWidgets GUI toolkit. Client database is SQLite. Server is

implemented in C++ utilizing wxWidgets GUI toolkit. Client database is SQLite. Server is implemented in Java (J2SE). An application level protocol is implemented for client-server

communication, secured via SSL (openssl). Stored files are encrypted (AES).

Online backup web portal Designed (visual design excluded) and implemented a web portal for serving online backup users.

Users can download / browse backed up files through the portal. MySQL, apache web server and

django framework are utilized.

Workforce Management System

Designed and developed workforce management system for <u>DenizBank</u> operation center, receiving an award for innovation. The tech stack uses Microsoft's Solver Foundation.

an <u>award for innovation</u>. The tech stack uses Microsoft's Solver Foundation.

IPTV (embedded software) – Teletext (level 1, 1.5, 2.5, 3.5) implementation

Subtitles (DVB, MicroDVD, SRT, SAMI) implementation

Personal Video Recorder implementation

Transport Stream parser implementation

Mobile 3D talking head Ported Xface talking head library to mobile platform (J2ME). Uses OpenglES and can render a face composed of 2K polygons with a frame rate of 25 FPS.

References

Name / Email Erdem Kurul - erdemkurul@gmail.com

About Former Microsoft employee, UCSD alum. <u>linkedin.com/in/erdemk</u>

Relation Software Development Manager, my direct manager at Intertech & Ziraat Teknoloji.