

Curriculum Vitae

Personal information

First name / Surname

Selçuk Cihan

E-mail

selcukcihan@gmail.com

Nationality

Turkish

Online profiles

[linkedin.com/in/selcukcihan](https://www.linkedin.com/in/selcukcihan), github.com/selcukcihan, selcukcihan.com, [stackoverflow](https://stackoverflow.com), [playstore](https://playstore.com)

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 @[Toptal](#)

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

Role	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 shimmming 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 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 DenizBank operation center, receiving an award for innovation . The tech stack uses Microsoft's Solver Foundation.
IPTV (embedded software)	<ul style="list-style-type: none"> – 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 OpenGL ES 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. linkedin.com/in/erdemk
Relation	Software Development Manager, my direct manager at Intertech & Ziraat Teknoloji.