

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, www.selcukcihan.com, [stackoverflow](https://stackoverflow.com), [android](https://android.com)

Education

Dates / GPA

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

Title of qualification

BS. in Computer Engineering

Research interests

Wireless networks and computer vision

Organisation

[Boğaziçi University](https://www.boğaziçi.edu.tr)

Dates / GPA

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

Title of qualification

MS. in Computer Engineering

Title of thesis

Parallel maximum flow solver for multi-core machines

Organisation

[Boğaziçi University](https://www.boğaziçi.edu.tr)

Desired employment / Occupational field

Software development engineer

Work experience

Employer

Amazon UK

Occupation or position held

Software Development Engineer

Main activities and responsibilities

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

Dates

05/2017 – 08/2018

Employer

INTERTECH A.Ş., intertech.com.tr

Occupation or position held

Senior Software Engineer

Main activities and responsibilities

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

Dates

10/2013 – 05/2017

Employer

Ziraat Teknoloji, ziraatteknoji.com

Occupation or position held

Senior Software Engineer

Main activities and responsibilities

Developing and supporting workflow engine and document management system of [Ziraat Bank](https://www.ziraatbank.com.tr).

Dates

06/2011 – 10/2013

Employer

AirTies Wireless Networks, airties.com

Occupation or position held

Embedded Software Engineer

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

CC Yazılım Ltd., www.ccyazilim.com

Occupation or position held

Software Engineer

Main activities and responsibilities

Online backup solution development - flagship product of the startup.

Dates

01/2009 – 09/2009

Personal skills and competences

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

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

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 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)

- 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

First name / Surname Erdem Kurul

About Former Microsoft employee, UCSD alum. [linkedin.com/in/erdemk](https://www.linkedin.com/in/erdemk)

E-mail erdemkurul@gmail.com

Relation Software Development Manager, directly managed me during my time at Intertech & Ziraat Teknoloji.