

# Résumé of Şahin Küpüşoğlu

Software developer, with a B.S. degree in Computer Science. Tracing on since the Spectrum+ new year gift on 1985 Jan 01. Got an assembler book 15 days later. Finished a 3D modeling and rendering system by 1987 Jun and still working hard. My diverse coding practice has converged to the following power patterns, but just as importantly, software development is a team sport and I take pride in being an esprit-de-corps team player.

## Systems Programming

C++ (with STL) is my core competence; [Brainbench certified C++ Master](#)



(scored 5.0 out of 5.0 in the advanced assessment on 2008 Mar). In a parallel thread, *Kernighan & Ritchie* are ever my heroes, for their signature concepts ever remain inspiring. Having once written a lot of Z80, Motorola 68K and iAPX 8086/80386 assembler, machine code perception is always coherent with high performance code. Low level systems programming skills cover multi-threading and synchronization. I enjoyed the Compiler Design class and I am experienced with language processing code (*Unicode / XML / HTML parser / multi-language lexicon etc.*), but Data Structures and Software Engineering classes were my highest priorities during undergraduate. I am fond of some parts of UML.

## Relational Databases

Experienced with SQL Server (10K+ lines of T-SQL), Access and the usual alphabet soup (*OLE DB / ADO / DAO / ODBC etc.*). Implemented two custom designed engines, one of which had full B-tree access to an in-memory database. Had a year of Informatica PowerCenter ETL & SAP R/3 at Tetra Pak.

## Financial Engineering & Excel

Hugely successful treasury deal capture, position keeping and risk management systems that I implemented in Excel (*including an implementation of Reuters Ticket Output Feed*) earned my employers 8 (eight) digit USD net profit. Creative Excel designs second-to-none, with a software engineering touch, and with many original techniques (*like virtual formula, UI-2-macro double indirection etc.*). Wrote 50K+ lines of VBA code. Received lots of finance training, including some exposure to Trema and Kondor+.

## R&D

Implemented a cutting edge [genetic algorithm](#) (*in C++*), with many original ideas, giving very good results with actual real world expression data of 15K+ genes (*hat's off to [Mersenne Twister](#)*). Replaced a 1GB+ database with 100+ tables by a single table with four columns extreme design; a unique object-relational mapping. Wrote natural language processing code (*in C++*) for fixed income deal capture from unrestricted Reuters Dealing 2000 conversation text, with high recall and precision rates. Invented [Digital Fluere 3D Metamorphosis](#) algorithm to generate a 3D shape transformation between two dissimilar models; was the best of its kind at the time.

## Diversity

Fluent with essential Internet technologies (*XHTML / CSS / JavaScript / ASP*).

Experienced with native Windows programming (*Win32 API / MFC / multi-threading / sockets etc.*). Coded most of the common modeling and rendering techniques of 3D Computer Graphics, including an OpenGL project for Bezier and B-spline patch fitting on Irix; received training on TDI Explore and Softimage on Silicon Graphics workstations. Used the following in small scale projects: *COM / OLE Automation / C# / VB.NET / Web Services / Java / Unix*.

## Communication & Management

From software development to managing people, the name of the game is *Communication*. The technicalities encompass English fluency, knowledge engineering and acknowledged empathy skills, while the leadership qualities are gaining depth. Self-expression is the ultimate art...

# 1. EMPLOYMENT

2008 Jun.. ..Today	<b>E-Business Manager @ <a href="#">Garanti Factoring</a></b> <ul style="list-style-type: none"><li>▪ Managing the E-Business software development team, which more than tripled in head count under my lead, I am responsible for proper execution of the IT vision of this market leading enterprise (<i>2011 turnover 8.3 billion USD</i>).</li><li>▪ Based primarily on SQL Server, SharePoint Server and IIS, along with a strong dose of Access / Excel / VBA, we design, generate and publish risk management and MIS reports; we implement sophisticated workflow applications; and major Internet projects are in the pipeline.</li><li>▪ Actively enforcing data quality, we seek a fully orthogonal model of semantic excellence interleaved with quality assurance.</li></ul>
2006 Feb.. ..2008 Feb	<b>Finance Modeler @ <a href="#">Development Capital Management</a></b> <ul style="list-style-type: none"><li>▪ Excel models of real estate development project financial life cycles, using cash flow models to analyze and compare different financing structures,</li><li>▪ Access database to track business development research,</li><li>▪ Greenfield setup of IT infrastructure and management of the IT operation.</li></ul>
2005 Mar.. ..2005 Dec	<b>Local Informatica @ <a href="#">Tetra Pak</a></b> <ul style="list-style-type: none"><li>▪ Participated in the SAP R/3 implementation of Tetra Pak, called <i>ISP</i>, which is one of the largest IT projects in history,</li><li>▪ Develop mapping programs for the entire data team using Informatica PowerCenter (<i>a suite of visual tools to extract, transform and load data</i>), for transitioning legacy systems towards ISP,</li><li>▪ SAP R/3 master data maintainer: primary for HR, backup for finance,</li><li>▪ Maintain legacy HR applications and act as the HR data super user,</li><li>▪ Design forms for the local master data maintenance web application.</li></ul>
2004 Nov.. ..2005 Mar	<b>IS Analyst @ Imperial Tobacco</b> <ul style="list-style-type: none"><li>▪ Worked for a wide range of technology applications: <i>budgeting, purchasing, setting up the network structure (international domain hierarchy, graceful degrading redundant Internet connectivity, ISDN pbx etc.), supporting users, assisting analysis of forthcoming ERP software; and all the same for the branch offices and the greenfield factory setup,</i></li><li>▪ Managed outsourced system engineers.</li></ul>
2003 Feb.. ..2004 Jul	<b>Software Engineer @ <a href="#">Teknoloji Holding</a></b> <ul style="list-style-type: none"><li>▪ Managed a team of two developers,</li><li>▪ Low level implementation of an ISAPI extension dll with 9K+ lines of C++, boasting: <i>a multi-threading pool with sync primitives, processing raw HTTP headers, using OLE DB consumer templates, generic caching by means of an in-memory database featuring a full B-tree implementation, essentially stateless, supports multiple languages, and an access control mechanism with positive and negative override in an inheritance graph,</i></li><li>▪ Extensive use of SQL Server (<i>10K+ lines of T-SQL</i>) inclusive of instead-of triggers; one-of-a-kind table design that implements an original object-relational mapping,</li><li>▪ Generic tool for dynamic creation of HTML &amp; JavaScript based UI screens that provide smart client-side interactivity for arbitrary row sets in multiple languages (<i>client side logic utilizing 3.5K lines of JavaScript</i>) boasting: <i>a full type mechanism for client side validation, a runtime mechanism for caching arbitrary HTML in js files thereby minimizing use of com resources, and a unique implementation of dialog box logic that can save and restore arbitrary user contexts on the fly,</i></li><li>▪ Using VB.NET, implement web services and parse XML data.</li></ul>

2001 Jun.. ..2003 Jan	<p><b>Senior Software Engineer @ Lipman Electronics, Research &amp; Integration Department</b></p> <ul style="list-style-type: none"> <li>▪ Field Services Automation is a SQL Server based client-server project utilizing Internet browsers for UI: <i>can render arbitrary tables and views, finding out involved columns and their types at run time, essentially stateless, supports multiple languages, access control by an inheritance hierarchy tree with positive and negative override, XML based dialog box logic, IEEE compliant design documents,</i></li> <li>▪ Participated in Lotus Notes based Field Services Automation projects for several banks, gaining quite some Domino Designer experience,</li> <li>▪ Designed and coded Technical Services Automation with Access,</li> <li>▪ Modest experience of POS Terminal embedded programming.</li> </ul>
1997 May.. ..2000 May	<p><b>Treasury IT Specialist @ Turk Economy Bank (now BNP Paribas)</b></p> <ul style="list-style-type: none"> <li>▪ Financial software development for deal capture, position keeping and risk management of FX, MM, Effective and TMU desks, with some exposure to Fixed Income and Precious Metals, based on Excel, Access and VBA, making extensive use of Reuters Real Time Financial Data Feed, with some experience of Bloomberg, Telerate and Unlock,</li> <li>▪ Developed Excel application <i>Tron</i> for the FX desk; with 5K+ lines of VBA code, its capabilities included: <i>track positions of multiple desks against TRY and multiple dealers in different currency pairs; talk directly with Reuters Dealing 2000 Ticket Output Feed; connections with bank's host system, ICU and TMU; slow-motion and hectic mode automatic quotation system,</i></li> <li>▪ Developed Excel application <i>Matrix</i> for MM, Forward and Swap in multiple currencies, featuring: <i>gap analysis; quotation system with market watch; forward, cash forward and swap calculators, with logic for reverse-engineering competition's prices; CBT deal capture and position keeping,</i></li> <li>▪ Both have implemented audio-visual warning systems, multi-currency holiday logic and an original technique for overachieving Excel's performance limits while also avoiding accidental modifications: <i>virtual formula.</i></li> </ul>
1995 Dec.. ..1997 Mar	<p><b>Military Service as Lieutenant @ Air War College</b></p> <ul style="list-style-type: none"> <li>▪ I developed <i>Gokcen Wargaming Simulation</i> during my military service at the Air War College of Turkish Armed Forces. An orthogonal tree design enables users to create arbitrary hierarchies of types and instances of <i>countries, armies, airbases, aircrafts, missiles, radars and fuel</i> with an explorer-like (<i>split-view with tree</i>) drag&amp;drop UI. Multiple users can define missions involving aircrafts from any airbase with arbitrary weapon loads and multi-way-point flight paths. The simulation is very detailed and includes <i>target tracking of aircraft and missile radars, sophisticated damage computations, precise fuel consumptions and millimetric altitude changes during linear flight due to curvature of earth which was modeled as a 3D oblate spheroid.</i></li> </ul>

## 2. EDUCATION

1987 .. 1994	Bogazici University / Faculty of Engineering / Department of Computer Engineering
1984 .. 1986	Istanbul University / Capa Medical Faculty
1984 .. 1984	Beyoglu Ataturk High School
1981 .. 1984	Ankara Fen High School
1977 .. 1981	Kadikoy College <ul style="list-style-type: none"><li>I was awarded the second place in the Tubitak Marmara Region Mathematics Contest,</li><li>I won the first place in the Kadikoy College English Composition Contest,</li><li>I was Turkey's twelfth and Turkey's twentieth in the qualifying exams of Ankara Fen High School.</li></ul>
1972 .. 1977	Cengizhan Primary School

## 3. TRAINING

2012 Jan 07..08	First Aid Training :: Took and passed the official Ministry of Health Certification Test on 2012 Jan 15 [ <i>Hayat Yildizi</i> ]	2005 Jun 24	SAP/MDMD-1000 Generic Use of Local MDM Web [ <i>Oscar Murguia</i> ]
2011 Dec 15..16	e-Factoring Workshop [ <i>European Bank for Reconstruction and Development / Turkish Factoring Association</i> ]	2005 Jun 21	SAP/MDFI-1500 Asset MD [ <i>Diego Brizuela</i> ]
2010 Jun 01..02	Game Theory and Strategy [ <i>Asc.Prof.Dr. Levent Koçkesen - The Banks Association of Turkey</i> ]	2005 Jun 20	SAP/MDHR-1000 HR Master Data [ <i>Diego Brizuela</i> ]
2010 Apr 12..14	International Financial Reporting Standards and US Generally Accepted Accounting Principles [ <i>Oğuz Kemal Bulut - The Banks Association of Turkey</i> ]	2005 Apr 25..29	Informatica PowerCenter [ <i>Martin Hulten</i> ]
2009 Oct 05..06	SQL Server 2008 Business Intelligence [ <i>Mustafa Acungil - Bilge Adam</i> ]	2004 Apr 11	Customer Centered Service [ <i>Fed Training</i> ]
2009 Sep 03..04	Fin 2.49 Essential Finance for Executives [ <i>Prof. Dr. Rüstem Hacirüstemoğlu - The Banks Association of Turkey</i> ]	2004 Mar 14	New Working Traits [ <i>Fed Training</i> ]
2005 Jul 01	SAP/MDCO-3500 Local Strategic Purchasing [ <i>Oscar Murguia</i> ]	1999 Oct 11..15	Advanced Risk Management Standards [ <i>Euromoney</i> ]
2005 Jun 30	SAP/MDCO-3000 General Purchasing MD [ <i>Oscar Murguia</i> ]	1999 May 29..30	Currency Options [ <i>Barclays Bank Plc</i> ]
2005 Jun 29	SAP/MDFI-1000 Controlling MD [ <i>Juan Fedio</i> ]	1998 Dec 12..13	Treasury Risk Management [ <i>Barclays Bank Plc</i> ]
2005 Jun 28	SAP/MDCO-1500 Customer Master SAP/MDFI-2500 Credit Master [ <i>Juan Fedio</i> ]	1998 May 27..28	Trema Forum '98 on Risk Management [ <i>Cannes – France</i> ]
2005 Jun 27	SAP/MDCO-1000 Vendor Master [ <i>Juan Fedio</i> ]	1998 May 16..17	Interest Rate Risk [ <i>Ugur Civelek</i> ]
		1998 Feb 07..08	Futures Markets [ <i>Ugur Civelek</i> ]
		1997 Oct 01..04	Treasury Information Technology [ <i>Quantitative Financial Software</i> ]
		1993 [2 weeks]	TDI Explore [ <i>Silicon Graphics Turkey</i> ]

## 4. CONTACT INFO & PERSONAL DETAILS

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Web site	<a href="http://kupusoglu.com/">http://kupusoglu.com/</a>
Personal details	<ul style="list-style-type: none"><li>Birthday: 1966 Nov 21</li><li>Sideline: <i>Photography / Taekwondo / Karate / Iaido / Parachute / SSB radio call-name: TA1CBB,</i></li><li>Military service completed as 2<sup>nd</sup> Lieutenant,</li><li>Fluent in English (<i>scored 7.5 in IELTS on 2007 Aug</i>).</li></ul>