Costa Shapiro

is **engineering software** since the early 90's:

- Lifelong passion → learning and exploration
- Academic background → research and development
- Rich experience → intuituion and pragmatism
- Product vision → business and strategy
- Process specialty → mentoring and leadership

Synopsis

- The first own paid project while still in high school (an educational robot program in the Technion CPLT)
- A total of 10 years of formal computer education from the high school up to the graduate school
- Part-time/full-time, office/remote, hourly/salary, team member/coordinator/leader, hands-on/consulting/supervising, open-source/know-how, all project scales + all company sizes, many areas of SW and HW done and might be interested in still
- With the web since its beginning to the present day from the bottom up
- Interested in developing **new** technologies/applications per specific business requirements in the agile way
- Also available for consulting on anything full-stack, from architecture through 3rd party technologies — to UX

Currently Relevant Technologies

Ruby world — my current generalpurpose/business-logic language of choice — and everything around it (including its awesome community)

Java world — the language of my Master work — and the gateway into the mighty JVM with everything around it

ECMAScript (aka **JavaScript**) world — the web scripting language with everything around it (from **HTML5** APIs to bleedingedge frameworks) — which is also good for some microservices

SQL world — still the default DBMS model/language — with its continually advancing technologies and tools

NoSQL world — notably including search and pub/sub systems — good for optimising data access ad hoc

Docker and friends (SW packaging/deployment), FFmpeg and friends (A/V processing), various RFCs-based technologies, **Git** and friends, Python etc

Historical Experienced Technologies

C/C++ world — Boost, Tuxedo, MFC, OWL, VxWorks, Tornado, ACE, Turbo Vision

bash, ksh, PHP, Perl, Tcl/Tk, Visual Basic, Pascal, COBOL

MS Access, Paradox/BDE, dBase, Clipper

CORBA, DCOM/ActiveX

Various Apache Jakarta technologies, JavaCC

Win32 userland, FreeBSD-based internet server setup, DOS

Studies

1999-2003	<u>Technion</u> (<u>CSD</u>) - M.Sc. in Computer Science (cum laude)
	"Object-Oriented Implementation of Reconciliations" (Reconciliations in Java) thesis
1995-1998	<u>Technion</u> (<u>CSD</u>) - B.A. in Computer Science (cum laude)
1991-1994	BOSMAT (Automatic Data Processing course) - Speciality Matriculation Certificate
Jobs	
2016-2016	Core Developer at Peer5 (core product team)
	Web (client-side) video P2P delivery plug-in system maintenance
	Trying to stabilise and extend the niche product technology
	- Docker (and friends), nodeJS, HTML5 APIs, web video players APIs
2016-2016	Lead Developer at Codefresh (core product team)
	Docker-based full (push-build-test-promote-launch) containerisation workflow as-a-service maintenance
	Development of an RSpec-based Docker composition testing framework
	- Docker (and friends), nodeJS, Ruby
2015-2016	Software Architect at <u>Showbox</u> (video processing and data management back-end system)
	video editing and delivery workflow back end ownership, video montage engine development
	- Ruby on Rails, FFmpeg and friends, Redis, multi-process multi-service high- speed processing architecture
2011-2014	Project Lead, Core Developer and Consultant at <u>Astrails</u> (various web/mobile app projects)
	technology expertise, architecture and interface design, wireframing, prototyping, requirements specification, production implementation, engineering support and management of web+mobile app projects
	- Ruby on Rails, Backbone+Marionette, nodeJS, RSpec, and a great deal of other contemporary client- and server- side technologies
2010-present	Developing and participating in a number of independent/open-source projects
	- Ruby on Rails, JavaScript, Sinatra, RSpec, Cucumber, etc

2009-2010

Senior Software Engineer at <u>RSA</u> (Verified by Visa / MasterCard SecureCode **project**, Herzliya)

production and development maintenance of the technologically complicated SAAS product family

- Java EE, C++/Boost/Tuxedo, ORACLE SQL, Python, bash, ksh, Tcl/Tk & other scripting

2007-2009

Senior Software Engineer at <u>Nielsen Online</u> (projects on interactive distributed systems for large-volume text-mining analysis, Herzliya)

full ownership of the company's core Consumer-Generated Media analysis project

solving stability, maintainance and performance issues on component and system levels

- Java EE & Apache Jakarta technologies (notably incl. Lucene), C++/Boost, SQL & custom DBMS's, XML processing, standard & custom client-server transports, bash & other scripting

2005-2007

Technological Leader and Founder at a personal information management web service start-up project

technology development (interface definitions, system architecture, algorithm and database design, etc)

start-up company related activities

- front-end web technologies, PHP5, Java EE & Apache Jakarta technologies, JDBC, PostgreSQL, FreeBSD, common internet server software

2002-2004

Senior Software Engineer at <u>Intel</u> (pre-silicon VLSI power estimation tool project, integrated VLSI CAD system, CAD Dept., Haifa)

VLSI technology domain experience (including system input/output specifications and real-data analysis)

subsystem architecture development

internal customer engineering support (VLSI projects)

cross-project coordination and developemnt

- C++, VLSI knowledge, internal infrastructure framework, Tcl/Tk, Perl

2000-2002

Software / Integration Engineer at QUALCOMM (several cellular communication related software-hardware projects, Haifa)

CDMA technology domain experience (both parties plus simulation/testing)

full-circle development of a hardware driver framework and applications

development, maintenance and refactoring of a distributed testing/simulation infrastructure

cell-phone system integration (including development of mid-layer embedded communication software)

- RT/Embedded systems, VxWorks, Tornado, CORBA, Visual C++, ARM, proprietary DSP, hardware-level protocols (cPCI, flash memory, etc), Win32, Perl

Software Developer (part-time) at Extent (former, now owned by Alepo) (Billing & Mgmt. 1999-2000 RADIUS ISP web-managed server project, Ramat Gan) development of custom management and report software modules - cross-platform C++, SQL (various DBMS's), Apache HTTP server, proprietary front-end template framework Teaching Assistant at <u>Technion</u> (basic CS courses, <u>CSD</u>, <u>CEESD</u>, Haifa) 1998-1999 Software Developer (part-time) at NetManage (several internet client projects, Haifa) 1997-1998 common internet protocols experience (email, ftp, telnet, etc) client software module development (including GUI components) infrastructure works - Visual C++, MFC, DCOM/ActiveX, range of internet protocols, Win32, other application technologies Software Developer (part-time) at the the Technion's Asher Space Research Institute 1995-1997 (TechSat microsatellite project, Haifa) design and implementation of complex physical algorithm modules implementation of telemetry-processing modules (including database design and usage implementation and integration hardware driver modules (GPS, etc) - C/C++, x86 assembly, Visual Basic, Paradox/BDE, various hardware interface protocols, Win32 (including GUI) Software Developer (part-time) at the Technion's Center for Promotion of Learning and 1992-1993 Teaching (A project of robotic manipulator based educational aid for spatial reasoning development course, Haifa)

design and implementation of robotic manipulator software (including GUI, command language, robot control and simulation)

- Pascal, Turbo Vision, x86 assembly, proprietary robot interface protocol, DOS

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