

Costa Shapiro

is **engineering software** with computer science and information technologies since the early 90's:

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

Synopsis

- Over a decade of tech/dev **leadership experience** (various complex, incl. data-intensive systems)
- The first **owned and paid** project while still in high school (an educational robot program)
- A total of 10 years of formal **computer science** education – from the high school up to the graduate school (Technion)
- Part-time/full-time, office/remote, hourly/salary, team member/coordinator/leader, hands-on/consulting/mentoring/supervising, OS/IP, all project scales + all company sizes, many areas of SW and HW – **done** (25+ years)
- With the **Internet** since its early days – including dev community connection and open-source contribution – from the bottom up (whole stack)
- Interested in owning and developing robust **new** technologies/systems/applications per specific business requirements (pragmatic agile ways)
- Also available for **consulting** on anything IT-related, from architecture – through 3rd party technologies – to UX (talk to me, I'm quite friendly)

Currently Relevant Technologies

Ruby world – my current general-purpose/business-logic language of choice – and everything around it

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 bleeding-edge frameworks) – which is also useful 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, Kubernetes and friends (SW production/deployment), Python and ML friends, Erlang and friends, FFmpeg and friends (**A/V** processing), various **RFCs**-based technologies, **Git** and friends, etc

Historical Experienced Technologies

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

Backbone+Marionette (JS), Apache Cordova (PhoneGap), Web browser extensions

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	Technion (CSD) - M.Sc. in Computer Science (cum laude) “Object-Oriented Implementation of Reconciliations” (Reconciliations in Java) thesis
1995-1998	Technion (CSD) - B.A. in Computer Science (cum laude)
1991-1994	BOSMAT (Automatic Data Processing course) - Speciality Matriculation Certificate

Jobs

2017-2019	<p>Server Team Leader / Chief Security Officer, and then, CTO at Owlytics Healthcare</p> <p>System back-end development & maintenance, including of large-data-volume analytical components</p> <p>Information security compliance planning & supervision</p> <p>Data ingestion / stream processing system architecture and execution</p> <p>Wearable sensor data ML research for healthcare</p> <p>Full data ingest+analysis+report production system ownership</p> <ul style="list-style-type: none">- Docker, Kubernetes and related technologies (on GCE, AWS); Ruby technologies for admin components, system tests, etc; Python technologies for data analysis; Apache technologies, such as Kafka and Lucene (Elastic stack); other NoSQL technologies, Elixir (Erlang VM)
2016-2016	<p>Core Developer at Peer5 (core product team)</p> <p>Web (client-side) video P2P delivery plug-in system maintenance</p> <p>Trying to stabilise and extend the niche product technology</p> <ul style="list-style-type: none">- Docker technologies, NodeJS, HTML5 APIs, web video players APIs
2015-2016	<p>Software Architect at Showbox (video processing and data management back-end system)</p> <p>video editing and delivery workflow back end ownership, video montage engine development</p> <ul style="list-style-type: none">- Ruby on Rails, FFmpeg and similar technologies, Redis, multi-process multi-service high-speed processing architecture
2011-2014	<p>Project Lead, Core Developer and Consultant at Astrails (various web/mobile app projects)</p> <p>technology expertise, architecture and interface design, wireframing, prototyping, requirements specification, production implementation, engineering support and management of web+mobile app projects</p> <ul style="list-style-type: none">- Ruby on Rails, Backbone+Marionette, NodeJS, RSpec, and a great deal of other contemporary client- and server- side technologies
2009-2010	<p>Senior Software Engineer at RSA (Verified by Visa / MasterCard SecureCode project, Herzliya)</p> <p>production and development maintenance of the technologically complicated SAAS product family</p> <ul style="list-style-type: none">- Java EE, C++/Boost/Tuxedo, ORACLE SQL, Python, bash, ksh, Tcl/Tk & other scripting
2007-2009	<p>Senior Software Engineer at Nielsen Online (projects on interactive distributed systems for large-volume text-mining analysis, Herzliya)</p> <p>full ownership of the company's core Consumer-Generated Media analysis project</p> <p>solving stability, maintainance and performance issues on component and system levels</p> <ul style="list-style-type: none">- 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	<p>Technological Leader and Founder at a personal information management web service start-up project</p> <p>technology development (interface definitions, system architecture, algorithm and database design, etc)</p> <p>start-up company related activities</p> <ul style="list-style-type: none">- front-end web technologies, PHP5, Java EE & Apache Jakarta technologies, JDBC, PostgreSQL, FreeBSD, common internet server software

2002-2004	<p>Senior Software Engineer at Intel (pre-silicon VLSI power estimation tool project, integrated VLSI CAD system, CAD Dept., Haifa)</p> <p>VLSI technology domain experience (including system input/output specifications and real-data analysis)</p> <p>subsystem architecture development</p> <p>internal customer engineering support (VLSI projects)</p> <p>cross-project coordination and developemnt</p> <p>- C++, VLSI knowledge, internal infrastructure framework, Tcl/Tk, Perl</p>
2000-2002	<p>Software / Integration Engineer at QUALCOMM (several cellular communication related software-hardware projects, Haifa)</p> <p>CDMA technology domain experience (both parties plus simulation/testing)</p> <p>full-circle development of a hardware driver framework and applications</p> <p>development, maintenance and refactoring of a distributed testing/simulation infrastructure</p> <p>cell-phone system integration (including development of mid-layer embedded communication software)</p> <p>- RT/Embedded systems, VxWorks, Tornado, CORBA, Visual C++, ARM, proprietary DSP, hardware-level protocols (cPCI, flash memory, etc), Win32, Perl</p>
1999-2000	<p>Software Developer (part-time) at Extent (former, now owned by Alepo) (Billing & Mgmt. RADIUS ISP web-managed server project, Ramat Gan)</p> <p>development of custom management and report software modules</p> <p>- cross-platform C++, SQL (various DBMS's), Apache HTTP server, proprietary front-end template framework</p>
1998-1999	<p>Teaching Assistant at Technion (basic CS courses, CSD, CEESD, Haifa)</p>
1997-1998	<p>Software Developer (part-time) at NetManage (several internet client projects, Haifa)</p> <p>common internet protocols experience (email, ftp, telnet, etc)</p> <p>client software module development (including GUI components)</p> <p>infrastructure works</p> <p>- Visual C++, MFC, DCOM/ActiveX, range of internet protocols, Win32, other application technologies</p>
1995-1997	<p>Software Developer (part-time) at the the Technion's Asher Space Research Institute (TechSat microsatellite project, Haifa)</p> <p>design and implementation of complex physical algorithm modules</p> <p>implementation of telemetry-processing modules (including database design and usage)</p> <p>implementation and integration hardware driver modules (GPS, etc)</p> <p>- C/C++, x86 assembly, Visual Basic, Paradox/BDE, various hardware interface protocols, Win32 (including GUI)</p>
1992-1993	<p>Software Developer (part-time) at the Technion's Center for Promotion of Learning and Teaching (A project of robotic manipulator based educational aid for spatial reasoning development course, Haifa)</p> <p>design and implementation of robotic manipulator software (including GUI, command language, robot control and simulation)</p> <p>- Pascal, Turbo Vision, x86 assembly, proprietary robot interface protocol, DOS</p>