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
- $\bullet\,$ Also available for consulting on anything full-stack, from architecture through 3^{rd} 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

2017- Server Team Leader / Security Officer at Owlytics Healthcare (core product team)

System back-end development & maintenance, including of large-data-volume analytical components

Information security compliance planning & supervision

Data ingestion / stream processing system architecture and integration

- Docker and friends, such as GKE; Ruby technologies for admin components, system tests, etc; Python technologies for data analysis; Apache technologies, such as Elastic stack and Kafka

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 highspeed 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

Technological Leader and Founder at a personal information management web 2005-2007 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

Senior Software Engineer at Intel (pre-silicon VLSI power estimation tool project, 2002-2004 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

Software / Integration Engineer at QUALCOMM (several cellular communication 2000-2002 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) 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

1997-1998

Software Developer (part-time) at the <u>the Technion's Asher Space Research Institute</u> (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 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

November 2017