**Assaf Wodeslavsky**

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**Executive summary:**

**Technologies/Languages/Platforms:**

* Modern C++, STL, win32, kernel drivers, multi-threaded programming, TCP/IP, UDP/IP, multicast, high-volume, low-latency, socket programming, client/server programming, peer-to-peer programming, distributed systems, MS SQL, Python, cryptography, messaging, C#7.0, C, TPL, ASYNC/Await, WCF.
* DevOps, GitHub, Java.
* System’s architect, design patterns.
* ASP.net, JSON, WPF, Xml, azure, JavaScript, AngularJS, OAuth 2, interop, jQuery, REST, MVC, TFS, IIS, Log4Net, OOD, OOP, .net core, Xamarin (iOS, Android, UWP),
* Typescript 2.0, Node.js and TCP/IP.
* Azure PaaS: IoT, Blobs, Tables, Queues, Service Bus Queues, Document DB, VM, azure SQL-server.
* Kendo UI, .NET 4.5, Bootstrap, Web API (RESTful), Win forms, webforms, Classic ASP, ISAPI, Visual C++ v6, VB6,
* Testing frameworks – Karma/Jasmine.
* Windows OS (XP/vista/8/10), web development / website development experience, UI Design and Development, Website/Browser user interaction experience, Wireframe, WinForms, trading systems experience for UBS bank,

**Personal/Technical Skills:**

* Strong OOA/OOD skills.
* Excellent oral and written communication skills.
* Proactive team player with a “can-do” attitude.
* Excellent analytical problem solver.
* Attention to detail and thoroughness.

**professional experience:**

**02/2016-current Sr. developer**

**Sharkk ltd. NJ, USA**

sharkk functions in multiple technological arenas including web-trading and app development.

Responsibilities:

* Design and implement a web-trading robot in C#.NET, Selenium, MS SQL,
* Implement mobile app in AngularJS.
* Implement RESTful server in ruby on rails, with PostgreSQL on docker.
* Implement serverside unit tests using RSpec.
* Implement clientside unit tests using karma.
* Implement e2e (end to end) ui (user-interface) tests using protractor.

**Technologies:** AngularJS, ruby, rails, postgreSQL, docker, Rest, karma, RSpec, protractor, CSS, SCSS, SASS, xml, JSON, GitHub, .NET 4.5, tdd, UI Design and Development, Wireframe, Website/Browser user interaction experience, DevOps.

**1/2017-07/2017 C++ fix-adapter developer**

**private client NY, USA**

private **FIX trading** platform client. [this was a side-project]

Responsibilities:

* Maintain FIX (Financial Information exchange) library.
* Update FX (Foreign Exchange) UBS-bank adapter to support NDF (Non-Deliverable Forward) currency pairs.
* Update RFQ (Request for Quote) and Stream auto-test.
* Perform adapter certification.

**Technologies:** C++, Python, SVN, visual studio 2017, FIX, NDF, RFQ, xml, DevOps.

**06/2014-01/2016 asp & js architect, developer**

**All Reservations ltd. Israel**

All Reservations is an online hotel-booking website.

Responsibilities:

* As the developer in the next-generation POC (Proof of Concept) system, my job was to build a complete solution that involved several interacting sub-systems:
* a set of (selenium + WCF-client + click once-deployment) website-scraping azure virtual-machines,
* an (AngularJS [images-carousel + typeahead] + bootstrap + google.maps.api.js) client-website,
* a (C# + MVC + azure-storage + azure-webjobs + WCF-server + tpl + azure-SQL-server + SQL transactions + linq-to-sql + [azure session-enabled service-bus-queues] + google.maps.api.web.services using web request) back-end.
* The system had to be performance-optimized using SQL-indexes as multiple website-scrapers were updating the SQL-database intensely simultaneously as a barrage of users were querying it. I designed the SQL-database to support internationalization.
* The azure session-enabled service-bus-queues were used for real-time full-duplex data-communications between the website and a set of real-time website-scrapers.

**Technologies:** MS MVC, azure, C#, asp.net, .NET, CSS, html, AngularJS, Web API (RESTful), design patterns, web development / website development, UI Design and Development, Wireframe, Website/Browser user interaction experience, DevOps.

**09/2000-03/2014 C# and C++ architect, developer**

**Netcore ltd. Israel**

Netcore developed an online virtual campus.

Responsibilities:

* A real-time video-conferencing system composed of a winform desktop app (Winforms) for multi-user real-time audio/video/desktop sharing and recording system.
* The system used interoperability with C++ libraries that I developed to interact with Microsoft DirectShow COM libraries and Win32 API
* The data transmissions had to be captured from the physical devices, compressed and sent in a super low latency manner.
* The system had to operate such that the CPU/memory/network footprint were insignificant to the user experience.
* Design and implement virtual campus websites: video on demand website, student assessment and examination website and campus management website.

**Technologies:** MS MVC, azure, C++, C++.NET, C#, asp.net, .NET, CSS, html, AngularJS, Classic ASP, ISAPI, Visual C++ v6, VB6, design patterns, TCP/IP and UCP/IP socket programming, message programming, distributed systems, transport protocols, real-time access-control, serialization, WinForms, UI Design and Development, Wireframe, Website/Browser user interaction experience, Java, DevOps.

**12/1998-07/2000 C kernel developer**

**phasecom ltd. Israel**

Responsibilities:

* Phasecom developed an ADSL network adapter. My responsibilities included the development of the network management applications as well as an NDIS filter driver.

Technologies: C++.

**11/1996-10/1998 C kernel developer**

**Ceephar ltd. Israel**

Ceephar developed aPCI video capture card.

Responsibilities:

* Develop a windows kernel mode physical device driver.
* Write the driver using the c programming language and the MS DDK (Microsoft Driver Development Kit) headers and libraries.
* The driver had to be very low-latency, reaching a staggering 30 FPS (Frames per Second) rate.
* Write an ISR (Interrupt Service Routine) that handled the device’s hardware interrupt - which fired upon each full image completion - and informed the application via a Windows Event.

**Technologies:** C++.

**05/1995-09/1996 assembly embedded**

**detect a leak ltd. Israel**

detect-a-leak held a patent that used hydraulic principles to detect even one drop of liquid passing through a pipe of any diameter.

Responsibilities:

* Design and implement a POC (proof of concept) network of devices that each managed such a hydraulic detector. Each such device had to:
* get reads from the hydraulic system via timed electric resistance measurements,
* analyze and command the hydraulics via electric relays,
* report the hydraulics status to a central server,
* receive commands from the central server,
* receive local input from a user interface (push buttons, potentiometers, selectors, pianos etc),
* display status locally on LED (Light Emitting Diodes)’s and LCD (Liquid Crystal Display),
* each device could be configured to ‘decide’ to shut off the valve if it detected a leak,
* The device’ PCB (Printed Circuit Board) based on the PIC18 (from Microchip family).
* I designed and implemented a long-distance (tested for over 1,000 foot) serial communication protocol between the devices and a PC (Personal Computer) with an MS DOS menu-driven application that I built.
* All devices (in a single apartment building) were ‘short’ connected to one cable which lead to the PC’s serial port.
* The PC had all the devices’ ID’s and ‘called out’ each device’s ID in a loop. Any device, after ‘hearing’ its ID, in the next clock-cycle down, had a chance to initiate a ‘conversation’ (update status change etc.)
* We successfully tested up to 100 devices in a 10 second cycle.
* For the communication protocol development, I actually had to use an oscilloscope during debugging.

**Technologies:** C, assembler, C++, PIC.

**academic background:**

**2014-2015 economics**

**Tel Aviv University Israel**

* Took several courses in economics and **machine learning**. I built a software **agent based model of the economy.**
* The application made predictions in **real-time** of the **interest rates** that the agents would agree on while **trading** in the **credit market**.

1994-1995 **B.S** **software engineering**

**Technion** **Israel**

* Including a very big project in **3D graphics** with **OpenGL**.

1990-1992 **M. SC.** **civil engineering**

**Columbia University** New York

1986-1990 **B.A** **Physics**

Yeshiva University New York