# <u>Harel Malka</u>

#### Email: harel@harelmalka.com

Phone: +44 (0) 77 93147 196 Residence: London, UK Nationalities: British, French and Israeli Languages: Fluent in English and Hebrew **Security Clearance** 

I have well over 25 years of commercial experience as a full stack software developer, founder and CTO. I've lived and worked in different cities around the world, spanning many industries and using various languages and platforms. I am focused on Python, JavaScript (vanilla & React), Dart (with Flutter) and Go as well as various dev-ops activities (bare-metal and aws). I am experienced in the full software *and* product life cycle, High scalability, CTO level guidance, developing technical strategies, building and leading development teams, product, and in particular bringing ideas to a successful launch. As well, I have experience in the world of Self Sovereign Identity.

I founded crmpro.com (2003), kadoink.com (2006) and was instrumental to the founding of Glow Digital Media which was acquired by ADTZ. In 2015 I co-founded BetSense, a real time marketing platform for mobile devices, as well as Cogmento CRM (cogmento.com) – a modern CRM and a complete reboot of CrmPro. I am also the director of Ourea Works Ltd, a software consultancy LTD under which I operate.

I'm very hands on and technical (I code and love it), pragmatic and friendly.

I'm open to contract work only

# **Recent Roles**

#### May-June 2023 Alva Yoga Mobile Meditation Application

Built a cross platform mobile app delivering subscription based weekly Yoga Nidra meditation sessions. Built using Dart/Flutter, utilising Firebase as a storage back-end.

# March 2023 Respiration Scan Contract Developer

Contracted to build the installation and setup process for an hardware device used in hospital rooms. Using Bash and the various Linux subsystems available for this single-board device, the company can now install and configure new devices quickly and efficiently.

# March 2022– March 2023 Gain Theory Contract Lead Python Developer

Brought in as a development lead for Rova Lab, an advertising analytics tool for data scientists in order to

introduce enhancements and structure to the code base and help develop it as a product.

**Core Technologies**: Python, Jupyter Lab, JavaScript & TypeScript (with React)

#### July 2022 – October 2022 Sayf / Steel Perlot – Self Sovereign Identity CTO / Lead developer

Was part of the founding team of a short lived Self Sovereign Identity platform initiative, developed in collaboration with Steel Perlot and Eric Schmidt (former Google CEO) with whom we held regular sessions. Oversaw all technical aspects of the project before it was decided to abandon it.

May 2022 – Jan 2023 Roundrack Interim CTO

Interim CTO (consultancy) for this fashion sustainability startup. Act as an advisor and bridge between product and technology as they prepare for their next phase and ultimately transition from a server-less architecture to a more robust custom built solution. (low hour count per month)

#### December 2021– February 2022 Engine Transformations / Cabinet Office Contract Python Developer

Development of a booking system for international and domestic learners for Cabinet Office's "Global Communication Academy". The system integrates directly with their *Open edX* educational software. The project required a fresh setup of the latest edX version on UK based infrastructure as well as development of a bespoke edX plugin to facilitate smooth integration with the two system.

Core Technologies: Python, Django, edX platform, Tutor, docker, kubernetes, AWS, mySQL

#### April 2021– December 2021 OneOf Contract Architect & Python Development lead

Architecture and development lead on the API layer for OneOf – a Tezos based NFT platform aimed towards the music industry. Worked closely with multiple teams in the US and Europe to provide the technical direction and core development of the platform.

Core Technologies: Python, Django, docker, AWS, postgreSql

# November 2020 – March 2021 T. Rowe Price Contract Python and JavaScript (React) Developer

Back and front end development (Financial Services).

Core Technologies: Python, JavaScript/React, Airflow, PostgreSql

July 2020 - October 2020

#### Ometria Contract Python and JavaScript (React) Developer

Joined a fully remote team to help facilitate a new development project for Ometria's analytics platforms

**Core Technologies:** Python, Micro services architecture, REST APIs and RPC, SqlAlchemy, PostgreSql, Docker, Kubernetes, AWS Infrastructure, JavaScript/React.

# January 2018 – May 2020 Engine Transformations / Department of International Trade Contract Technical Architect and Lead Python Developer

Technical Architect and development lead on a first of it's kind digital Trade Remedies case management system, developed for the Department of International Trade, and transferred to the new Trade Remedies Authority. This is a greenfield project developed within GOV.UK environment, delivered on time and budget and was the first green lit Brexit project. Passed two successful independent pen-tests and launched February 2020.

**Core Technologies:** Python, Django, Micro services, Html/Css/Javascript, PostgreSql, Docker, ElasticSearch, CloudFoundry, Gov PAAS / AWS .

# July 2017 – January 2018 Babylon Health Contract Python & JavaScript / React Developer

Development of micro services powering up the Babylon health check report and mobile app monitor. Developed a system to template dynamic data feed based on multiple data sources and services.

Development of the health check report UI in JavaScript & React.

**Core Technologies:** Python, Micro services, Nameko, PostgreSql, RabbitMQ, Docker, Circle CI, JavaScript, React, Webpack

# April 2017 – July 2017 Bank of America / Merrill Lynch Contract Python Developer

Working on BofA Mifid2 reconciliations project to bring the bank in line with recent and future regulatory compliance from the FCA.

Core Technologies: Python, Quartz, Sandra DB, AMPS, HDS

#### October 2016 – February 2017 Recyclabox.co.uk Contract CTO / Development Lead

Contracted to develop the production level core back end application for recyclabox.co.uk (based on an existing low-level prototype), as well as consult on technical strategies and hire a development team. As well, developed a Raspberry Pi based device to measure 3G signal strength in remote locations for multiple network operators at a time and log them for analysis.

Core Technologies: Python, JavaScript, Django, Celery, RabbitMQ, PostgreSql, Linux, Bash, Ansible

# 2015 - Current BetSense Co-Founder / CTO

A sport betting marketing platform for betting operators, which allows the operator to deliver real time inmatch tailored push notifications following specific rules and conditions set by the operator. The system is currently live. Developed the core platform from prototype to production level and delivered the technical strategy from inception to release. The company is now operated by my partner.

**Core Technologies**: Python, Django, JavaScript, React/Redux, Ansible, Celery, PostgreSql, RabbitMQ, AWS, ZeroRpc, Monolithic and Micro Services architecture

# May 2009 - Febraury 2016 Glow Digital Media CTO / CIO, Lead Developer

I joined the 2 founders of Glow on day zero to build the Glow Machine, a social advertising platform used by many agencies across the world to effectively publish and manage large scale campaigns on Facebook, Twitter and Instagram. I built the first prototype version of the platform's back-end and User Interface and then transitioned it to the full production level product, which at its peak handled over 250 Million calls a day to Facebook alone. As well, I developed Glow's tracking system (using Go) which handled very high throughput of incoming data.

Took part in the investment raising round, dealing with the investor's technical due diligence process. Once funding was acquired I enhanced the infrastructure, built a team of talented developers and established the tech methodology, to help Glow reach a very high standing in the social advertising landscape. In my last year and half at Glow I moved on to develop new products and explore new markets as its Chief Innovation Officer.

Glow was acquired by ADTZ and both companies re-branded under the AdGlow name.

**Core Technologies**: Python, Django, Go, PostgreSql, MongoDB, Celery, RabbitMQ, JavaScript, ExtJS, Cl/Jenkins, Agile/Scrum, AWS, ElasticSearch

#### 2003 - Current cogmento.com – US / UK Founder / CTO / Development Lead

In 2003 I founded crmpro.com (formerly called freecrm.com), providing a freemium model fully featured CRM application. The system is still live and currently supports close to 500K free users and a substantial number of paid ones.

The company was rebooted as Cogmento CRM, a brand new system to fit a modern age. The new system is built as a Python based API layer with a very large React/Redux front end on top. The API allows for 3<sup>rd</sup> party developers to interface with it and create custom developments to enrich the user's experience. The CRM integrates a complete telephony solution which allows calls to be run through the system, and have their recordings available, full email integration and advanced campaign functionality. As well the CRM is also a VCM – Verifiable credentials Management system, which integrates with Microsoft Entra to issue credentials that can be held in MS Authenticator.

**Core Technologies (new system):** Python, Django, Go, PostgreSql, Celery, RabbitMQ, JavaScript, React/Redux, Webpack, Ansible, Twilio, AWS services, Verifiable Credentials and Self Sovereign Identity, AI integrations.

#### 2014

#### Unibet – Contract

Developed Unibet's real time Goal push notification system in Go, still in use today. The system handles all live games across the world sending out targeted push notifications while managing to perform very well on a very small footprint.

Core Technologies: Go, PostgreSql

# 2009 BBC World Services - JavaScript developer (Contract) BBC – Project Developer (Contract)

I was contracted by the BBC to provide front end development to their CMS system, using JavaScript and the Dojo toolkit. Later on I was contracted by Anthony Rose to build the email notification system for iPlayer.

#### 2007-2009

#### Kadoink.com Co-Founder, Technical Architect and Development Lead

Co founded this global telephony start-up which facilitated all the actions required to do telephony and SMS via the Internet. Our system could schedule phone calls, handle conference calls, SMS Chats, voice marketing calls and more, and could be controlled from a web interface, SMS commands and Chat bots. I developed the first version of the platform and built the technical team once investment was acquired. **Core Technologies**: ColdFusion, Java, PostgreSql, Asterisk, SMS Gateways

# 2003-2007 OLM Group Technical Architect and Lead developer

I was the architect and lead developer of social care case management platform, CareFirst and CareAssess, used by over 75 local authorities in the UK.

Implemented various development methodologies and a unique framework to facilitate rapid development of forms and their processing, as well as providing guidance and mentoring to more junior developers. **Core Technologies:** ColdFusion, Java, Oracle

# **Recent Open Source Projects and Contributions**

#### StrudelPy

A Python SMTP client to send out emails in a Pythonic way https://github.com/harel/StrudelPy

#### S3ChunkUploader

A library for Django applications, which facilitates stream-uploads to Amazon S3, completely bypassing the server's local file system.

https://github.com/uktrade/s3chunkuploader

#### Metatron

A Python library to parse HTML meta tags https://github.com/harel/metatron

Feed-gov-back

A small framework for adding API enabled user feedback forms

#### https://github.com/uktrade/feed-gov-back

#### **React-big-calendar**

A Google style calendar component in React. Contributed the date-fns integration.

#### Nameko-Cors

CORS middleware for Nameko https://github.com/harel/nameko-cors

As well made contributions to react-big-calendar, semantic-ui-react, dpath

#### **Current Core Skills (distilled list)**

Python, JavaScript, React, Redux, Go, Django, Linux, Bash Shell, PostgreSql, mySql, MongoDB, RabbitMQ, Celery, Ansible, AWS & Bare Metal infrastructure setup. Large scale Monolithic and Micro service architectures. Technical strategies, CTO level consulting, technical team hiring, presenting technology to the less technical.

#### The I-also-love-to-do-these-things list

Music (former Techno producer, guitar), live gigs, cooking, archery and gaming.

#### Further history and references available upon request.