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Top Skills

Technical Leadership
Technology Management
Engineering Management

Languages English

Paul Watson

Experienced Technical Consultancy and Web Development City of Cape Town, Western Cape, South Africa

Summary

I am a full-stack web developer with 26 years of professional experience in web-development, team building, product process, and scaling digital technology businesses. Currently I am the CTO@OpenUp.org.za, a non-profit open-data organisation, and have 2 days a week available for other work.

My main coding tools are Python, Django, Ruby on Rails, React, PostgreSQL, JavaScript/TypeScript, JSON, HTTP APIs, Redis, AWS, HTML, and CSS/SCSS.

I co-founded FeedHenry (acquired Redhat) and Kinzen (acquired Spotify), was the first technical hire and CTO at Storyful (acquired by News Corp), CTO of CaliberAI, and am the CTO@OpenUp.org.za.

Note that I am ethically and pragmatically opposed to further generative AI and LLM development, let us build some useful digital tools for people instead.

Experience

OpenUp (formerly Code for South Africa)
Chief Technology Officer
October 2020 - Present (4 years 1 month)
Cape Town, Western Cape, South Africa

As CTO of a funding-dependent non-profit with over 8 years of critical public projects my responsibilities not only included new projects but ensuring the continued operation of existing projects often in resource constrained environments. Technically OpenUp's projects range from intensive Python Django and PostgreSQL web applications to rapidly built React and JavaScript NodeJS SPAs. We run on the cloud including AWS, Netlify, and Vercel. I am responsible for the development team which includes full-time and part-time employees and contractors.

Somerset Strikers Cricket Club Vice Chair September 2022 - Present (2 years 2 months) Somerset West, Western Cape, South Africa

Co-started the Somerset Strikers Cricket Club with Wesley Moodie (Chairperson and 2005 Wimbledon Mens Doubles Champion), Fiona Haughney (hon. secretary), Linda Hartley (treasurer), and Jimmy Sounes (club captain.) Helped grow the club to over 100 members in its first season, organised over 60 inter-club/school matches, and gained Western Province Cricket Association accreditation.

Used my digital skills and experience to design, build, and operate the NextJS React NodeJS website hosted on Vercel.

CaliberAl
Chief Technology Officer
November 2019 - April 2024 (4 years 6 months)
Dublin, Ireland

Led the development of fine-tuned Large Language Models (LLM) for classification and generative AI tasks. Built various customer web APIs in Python, web applications and dashboards in Ruby on Rails, a Wordpress plugin, browser extensions in JavaScript for Chrome, Safari, and Firefox, a Scrapy web scraper for media monitoring, and a marketing website in NextJS. Worked closely with a team of skilled annotators to produce unique synthetic data-sets for training LLMs. Setup and migrated technical infrastructure from Amazon AWS to Microsoft Azure to Google Cloud. Managed the various products of CaliberAI. Setup and evaluated customer metrics using Umami. Experimented with GPT-2/3 for data-set generation, prototyped conversational user interfaces and various formatters using ChatGPT/GPT-4. Advised on pricing strategy, customer contracts, company direction, and media engagement.

Somerset West Cricket Club Junior Section Club Captain May 2022 - June 2022 (2 months) Somerset West, Western Cape, South Africa

My priority as Junior Section Club Captain is and will remain your children's enjoyment of and progress in cricket.

Kinzen

CTO and co-founder September 2017 - September 2019 (2 years 1 month)

Cape Town Area, South Africa

Working with two former colleagues from Storyful we built an 11 person design, research, curation, and development team in Ireland. We delivered an iOS mobile app that measurably improved the news feeds of thousands of users, processed tens of millions of news stories, and launched a white-label Ruby on Rails and React web-app for Ireland's largest media group. We also secured funding from the Google News Initiative and delivered working software to their milestones.

Technically my team and I created and maintained HTTP REST and GraphQL APIs the iOS app relied on using Ruby on Rails and NodeJS backed by PostgreSQL and Redis. Our payment API handled thousands of iOS receipts and Stripe payments. Our news API processed hundreds of thousands of unstructured news stories per day with AWS S3 and SQS. These stories were run through NLP and several layers of custom data processing. Our model also isolated personal user data from non-personal data ensuring high levels of privacy while still delivering personalised services. One of the Rails APIs was responsible for daily scheduling of newsletters with Mandrill for thousands of users across various time-zones. These APIs were re-used for a white-label Ruby on Rails website that used React. We worked closely with our data partner, ScrapingHub, who used Scrapy and Python. Additionally we worked with Algolia for instant search, and TextRazor for initial NLP.

These production systems were preceded by several rapid Ruby on Rails prototypes to research and test user acceptance of key ideas including conversational bots for Twitter DM and Facebook Messenger.

Over the course of the 2 years I was responsible for and involved in the hiring of several of our team, technical strategy of the business, securing and operating our production systems, initial idea prototyping, customer and partner technical relationships, and proposal writing.

ChangeX
Web Developer
October 2015 - October 2017 (2 years 1 month)
Dublin, Ireland

Developing new features and refactoring existing code (Ruby on Rails, JavaScript, PostgreSQL, CSS, HTML/HAML, Algolia), performance and

security of the platform (Heroku, AWS S3, AWS CloudFront, SSL), and instilling a product development process (Scrum agile).

KonnectAgain

Consultant

October 2015 - December 2015 (3 months)

Dublin, Ireland

Product (UX, UI, analytics, metrics), code (AngularJS), process (Scrum agile), operations (internal knowledge management), and team building consultant.

Storyful

CTO

April 2011 - September 2015 (4 years 6 months)

Dublin, Ireland

I was the first full-time technical hire at Storyful and saw it grow from 6 people to over 100 and remained through the acquisition by News Corp in 2013 for \$25m.

My initial responsibilities were to manage and then move an out-sourced development team from the Ukraine to Ireland. Recruiting and retaining technical talent was a key responsibility. I worked with my growing team to instil a customer and business focused product development process. Throughout the 5 years we worked closely with the editorial, operational, and business and sales teams to improve and scale our business. I spoke and managed meetups and events in the area. I was a member of the executive team pre and post acquisition and attended board meetings. I was also responsible for the technology budget which involved presenting our case to the CTO of News Corp.

Digital Reach Group

Consultant

April 2011 - April 2011 (1 month)

Advised on the viability of cross-platform mobile toolkits and the development of an iPhone and mobile-web app for a leading Irish financial institution.

Global Business Register Ltd

Developer

February 2011 - April 2011 (3 months)

Developed business registry information systems.

MUZU.tv

Senior Web Developer

February 2010 - February 2011 (1 year 1 month)

MUZU.tv is Europe's largest online provider of officially licensed music videos (including the Big Four record labels) with over a million unique views a month delivering tens of millions of high definition videos to users worldwide. I was brought in to lead an established web-team in the development of new on and off-site features while maintaining and improving the existing site. During my time at MUZU.tv we undertook a successful site-wide revamp and continued to increase on and off-site views month by month. I engaged with senior management, site operations and the back-end development team. MUZU.tv demanded high-uptime, frequent deployments with rapid turn-around times on new features for a heavily trafficked website.

TSSG

Developer

October 2005 - February 2010 (4 years 5 months)

Co-founded, secured national funding for and developed the FeedHenry project which eventually sold to RedHat for \$82m. Responsibilities included conceptualisation, graphic design, front-end implementation, systems architecture, back-end prototyping, usability and user-experience testing. I worked directly with senior customers in leading Irish telecoms companies. I continued to successfully secure national funding for the TSSG and was the technical lead on a proposal to the European FP7 funding programme. I also consulted on and produced conceptualisations, mockups and prototypes for various TSSG projects including working with a senior customer in a leading Irish publishing company from initial idea conception through to beta service delivery. Throughout this work I have worked in and led small to medium teams dealing with software developers, graphic designers, marketing and sales professionals, external contractors, PhD students, national and international funds managers, users and internal senior management.

The Code Project

Developer

October 2004 - July 2005 (10 months)

Responsible for developing new features and maintaining existing systems (back-end and front-end) on the world's largest Microsoft developer website. Worked with an international team reaching from Canada to India to Australia to South Africa. Also interacted with the 5 million strong Code Project community.

Bluegrass Digital Web Developer 1998 - 2005 (7 years)

Recruited as a junior web developer and over the course of 5 years was promoted to senior web developer (front-end and back-end) with responsibilities including formal specification creation, customer interaction and user interface design. Customer facing, on-site role including contractor negotiations.

Radio Retail Developer 1998 - 1999 (1 year)

The creation and operation of an internet based in-store radio broadcasting system. This involved the development of a client-server system able to stream audio files to multiple locations with a minimum of user interaction. My role also included working with store managers in the deployment of hardware and continued operation of the software.

Education

Van Zyl & Pritchard

Diploma in Computer Programming, Computer Programming · (1998 - 1998)