

Harmen Dark

TECHNICAL LEAD · CLOUD ENGINEER

London, United Kingdom

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Education

University of Auckland

B.Sc IN COMPUTER SCIENCE AND INFORMATION SYSTEMS

Auckland, N.Z

Mar. 2011 - Nov. 2013

Skills

AWS	API Gateway, CDK, CloudFormation, DynamoDB, EBS, EC2, ELB, EKS, Fargate, Lambda, Route53, Serverless, SQS, SSM
Back-end	Express, Flask, Django, GraphQL, gRPC, Kafka, RabbitMQ, SpringBoot
DevOps	Ansible, Bash, CircleCI, Docker, Git, HAProxy, Heroku, Jenkins, Kubernetes, Linux, NGINX, TerraForm
Database	CosmosDB, Firebase, Microsoft SQL, MongoDB, MySQL, PostgreSQL, Redis
Front-end	Angular, CSS3, Electron, HTML5, Less, React, Redux, RxJS, Sass, Vue, Web3, WebGL
Mobile	ObjectiveC, React Native, Swift, Xamarin
Monitoring	ElasticSearch, Grafana, Kibana, Logstash, Nagios, Nexus, Prometheus, SonarQube
Programming	C#, Java, JavaScript, Python, Scala, Solidity, TypeScript
Testing	Chai, Cypress, Enzyme, Jest, JMeter, JUnit, Mocha, Playwright, React Testing Library, Selenium

Work Experience

Archax

London, U.K

SENIOR SOFTWARE ENGINEER

Nov. 2022 - October 2023

- Led development of multiple features for the ACE trading platform including graceful error handling, internal WebSocket messaging, and message batching resulting in a 30% increase in service performance.
- Developed FDC3 compliant dashboards (React, Finsemble, d3.js, Node.js) for exchanging digital assets including cryptocurrencies.
- Took ownership of the Archax client web portal (React, Playwright), improved security by migrating to a hosted package manager and implemented automated vulnerability testing.
- Worked with compliance and regulation SME's to capture AML/KYC data and comply with GDPR regulations.
- Engineered an auto-upgrade service (AWS, S3) to deploy critical updates across multiple operating systems.
- Mentored developers on best practice for front-end, security and cloud development.

Nucleus Financial

Remote

SENIOR SOFTWARE ENGINEER (CONTRACT)

Oct. 2021 - Nov. 2022

- Led the development of Nucleus Narrate - a financial reporting platform to handle investment portfolios(React, Material UI, Jest).
- Implemented best practice including GraphQL, SSR and state management.
- Hands-on mobile development (React Native) of Nucleus Go including feature development, bug fixes and app store releases.
- Built a performant GraphQL API layer into an existing SpringBoot service (Java, AWS).

Twig Education

Remote

SENIOR SOFTWARE ENGINEER (CONTRACT)

Apr. 2021 - Oct. 2021

- Extended functionality of microservices (Django, RabbitMQ, GraphQL, Postgres) to integrate with Clever and ClassLink APIs.
- Led development of several front-end services to integrate into a high-performing MFE architecture (React, TypeScript).
- Improved unit test coverage (Enzyme, React Testing Library, Jest) and implemented integration tests (Cypress, Python).

Rackspace

Remote

SENIOR CLOUD ENGINEER (CONTRACT)

Oct. 2020 - Apr. 2021

- Migrated services for an on-premise logistics application onto AWS (Serverless, TypeScript, Python, Kafka).
- Automated resource provisioning and IaaS improvements (Terraform, CloudFormation, SSM).
- Optimised search lambdas through indexing and pagination, reducing response times by 70%
- Reduced message processing ingestion through optimising validation and caching, reducing P99 latency by 20%.
- Deployed a performance load testing solution (JMeter, Taurus, Fargate) to benchmark API requests to find and reduce bottlenecks.

VisitScotland

Edinburgh, U.K

SENIOR SOFTWARE ENGINEER (CONTRACT)

Feb. 2020 - Oct. 2020

- Developed components, libraries and services to be used across multiple VisitScotland flagship products (Vue.js).
- Engineered a server-side rendering solution(Puppeteer, Redis, NodeJS), enhancing accessibility, performance and SEO for over 1.5 million daily requests.
- Customised Webpack to work across multiple environments with Babel, reduced code reuse by 60%
- Automated accessibility testing and integration testing with Maven, Jenkins, JUnit, Docker, Lighthouse, Selenium.
- Integrated Nexus Repository Manager, SonarQube, Elkstack into the CI/CD pipelines, improving code quality and monitoring.

Zonal Retail Data Systems

Edinburgh, U.K

SENIOR SOFTWARE ENGINEER (CONTRACT)

Jul. 2019 - Feb. 2020

- Developed multiple front-end interfaces, components, libraries (React, TypeScript), feature flagging, event-sourcing for A/B testing.
- Extended microservices (Django, RabbitMQ, MongoDB, CosmosDB) for an enterprise management system.
- Improved code quality by implementing automated UI testing (React Testing Library, Cypress).
- Significantly enhanced CI/CD processes by transitioning from legacy pipelines to scripted pipelines (Azure Devops, Helm, Docker, Kubernetes) resulting in increased portability, security and 30% increased deployment speed.

New Zealand Trade And Enterprise

Auckland, N.Z

TECHNICAL LEAD (CONTRACT)

Jul. 2018 - May. 2019

- Technical lead for a government customer portal reaching over five-thousand customers, five-hundred internal staff users, achieving an NPS of just under 70.
- Engineered scalable and secure backend architecture (Node, TypeScript, Redis, CosmosDB, Auth0).
- Developed front-end architecture (React and Typescript) using caching, compression and pagination to decrease average page loading times by 80%.
- Reduced login time for users and staff by implementing single sign-on (Auth0, Azure AD) with multiple identity providers.
- Automated deployments of Discourse with Docker, significantly reducing maintenance times and improving security.

New Zealand Transport Agency

Auckland, N.Z

SENIOR SOFTWARE ENGINEER & SCRUM MASTER (CONTRACT)

Nov. 2017 - Jul. 2018

- Worked on the development of several tourism mobile apps (Xamarin, C#, Java), eliminated bugs, implemented accessibility features.
- Implemented automated testing frameworks (nUnit, SpecFlow) for unit and integration testing.

Propellerhead

Auckland, N.Z

SENIOR SOFTWARE ENGINEER (CONTRACT)

Feb. 2017 - Nov. 2017

- Enhanced functionality for the AT Mobile application (ReactNative, TypeScript, Redux) for over 200,000 users by adding features and bug fixes.
- Migrated Auckland Museum API mappings to use dynamic RDF triples from static mappings (Scala, Java), resulting in an increase in search engine visibility.
- Improved the RESTful API design of the Auckland Transport GTFS API (NodeJS, TypeScript, Redis, PostGres) for third-party applications.

DeRef

Auckland, N.Z

DEVOPS ENGINEER (CONTRACT)

Jul. 2016 - Feb. 2017

- Worked with multiple clients to design and implement CI/CD pipelines and automated delivery (AWS, Python).
- Deployed and maintained development tools and infrastructure (Jenkins, Ansible, Vagrant, Bash).
- Migrated services to Lambda and S3 to reduce operational costs by up to thirty percent.

Solution Management

Auckland, N.Z

SOFTWARE ENGINEER

Jul. 2015 - Jul. 2016

- Designed and built a web portal (ASP.net, C#, MySQL) for Holden NZ and New Zealand Police to track the status of police vehicle builds.
- Maintained stored procedures used for generating reports using SQLServer.

Joker Seven

Auckland, N.Z

SOFTWARE ENGINEER

Dec. 2012 - Jul. 2015

- Created a range of financial educational tools (HTML, CSS, JavaScript, Box2D, WebGL, Python, PHP) aimed at teaching students financial literacy skills.
- Developed several cross-platform mobile games and marketing applications (Swift, Java)

Awards & Certifications

Sep. 2023 **AWS Certified Solutions Architect** - Professional

Jan. 2021 **AWS Certified Solutions Architect** - Associate

Oct. 2018 **NZTA All Access Hackathon** - First Place

Extracurricular

Krunch.ai

Remote

WEB3 DEVELOPER (CONTRACT)

Feb. 2022 - Oct. 2022

- Built a white-label marketplace front-end for exchanging ERC721 tokens on the Solana blockchain.
- Implemented CandyMachine, Metaplex and SPL-token to mint and exchange non-fungible tokens.
- Developed a customisable front-end with Web3, React, Sass and NextJS. Smart contract development with Rust.

Karat

Remote

INTERVIEWER & QUALITY CONTROL

Oct. 2019 - Mar. 2022

- Interviewed over 600 candidates for top-tier tech companies including Amazon, Pinterest and Wayfair.
- Mentoring students to help assess and provide feedback on technical and interviewing skills.

NZILA

Auckland, N.Z

PYTHON DEVELOPER (CONTRACT)

Feb. 2018 - Mar. 2019

- Built and extended multiple features into the NZILA web portal for over 500 users.
- Improved security by adding extra protection to mitigate DDOS attacks, XSS and SQL injections.