

Patrick McAndrew

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Portfolio: <http://urg.name>

Overview

Highly experienced Senior Polygot Developer/DevOps Engineer/Hands on CTO with expertise in cloud technologies, Node.js, Python, PHP, C#, and more. Skilled in a variety of frameworks, libraries, databases, analytics tools, and DevOps technologies. AWS Certified Solutions Architect (Professional) certified.

Languages: javascript/node.js/typescript | php | python | c#

Frameworks/Libraries: react | vue | symfony | lumen | .net standard/.net core

DBs/NoSql: mysql/mssql/postgres | redis/elasticsearch/mongodb/dynamo db

Analytics: mixpanel/google analytics | sixpack (a/b testing)

DevOps: nagios/sensu | jenkins/github actions/azure ado pipelines | puppet/ansible | packer/terraform | varnish/apache/nginx/haproxy | docker/kubernetes

Servers/Cloud: linux (ubuntu, centos)/windows | aws/azure

Career history

[EWG](#) (*Remote*)

Contract Developer

July 2023 - Present

- Key Skills: AWS, Lambda, Node.js, OpenApi, Postgres, Terraform, Serverless Framework
- Designed and developed a RESTful API supporting multiple tenants, encompassing features such as currency conversions, payment processing, and administrative capabilities.
- Implemented robust security measures by incorporating technologies like Mutual TLS (MTLS), OAuth 2, JWT Tokens, and Postgres Row Level Security to adhere to best practices.
- Established an OpenAPI-driven documentation website featuring a sample Postman Collection, which included essential detached JSON Web Signature (JWS) signing and validation processes.

[Open University](#) via Infosys Consulting (*Remote*)

Contract Developer

June 2023

- Key Skills: Azure, Azure DevOps, PHP, OpenAI
- Successfully migrated an OpenAI PHP application into Azure and implementing essential features such as Logging, Exception Handling, and Azure AD Authentication.
- Created Azure DevOps, CI/CD Pipelines

[BP](#) via Apex Systems (*Remote*)

Contract Developer

Nov 2021 - Mar 2023

- Key Skills: Node, Typescript, AWS Lambda/DynamoDb, Azure Pipelines, OpenApi, CDK

- Developed and integrated features in micro-service APIs for 3DS, Core Payment, and Mastercard Adapter
- Led implementation of a reporting micro-service, which was developed to ensure zero impact on production API response time
- Ranked in the top 5 most productive developers across the project teams of over 100, based on the number of story points closed throughout 2022
- Enhanced developer productivity by automating tasks within Azure DevOps (ADO) Pipelines.

[Accession Healthcare Consulting](#) (Remote)

Contract Developer

July 2021 - Oct 2021

- Key Skills: Php, Lumen, Vue, Typescript, Terraform, AWS Fargate/RDS, Github Actions
- Implemented DevOps practices at Accession by establishing Github Actions CI/CD pipelines, adopting Infrastructure as Code (IaC) principles, and containerising applications
- Migrated a production application from a smaller hosting provider (virtual host) into Docker and hosted via AWS Fargate & RDS
- Developed and implemented API methods and functionality within the Pathway Pro application

[Nibble](#) (London, UK)

Contract DevOps Engineer

May 2021 & Nov 2020 - Dec 2020

- Key Skills: Python, AWS Fargate/EKS/Lambda, Serverless Framework, Terraform, Docker, Kubernetes, React, Vue, Node.js, Next.js
- Introduced DevOps practices to Nibble by setting up pipelines, Infrastructure as Code (IaC), and containerising applications
- Conducted load testing to verify the capacity of the API to handle anticipated peak workloads
- Containerised Shopify app (Node/React) & adapted the data layer from Mongo to MySQL
- Second project optimised hosting costs by migrating from ECS Fargate to EKS Kubernetes

[Wray Castle](#) (Remote)

Contract Digital Transformation Lead

Oct 2020 - Apr 2021

- Key Skills: Salesforce, Apex, LWC, Shopify, Azure Functions, C#, Canvas LMS, Shopify
- Led a comprehensive digital transformation initiative, transitioning a business reliant on Excel to a Salesforce and Shopify ecosystem with solutions for sales, marketing, and operations
- Created a custom integration between Shopify and Salesforce for customers and orders using C# and Azure Functions
- Developed a Salesforce user portal (using LWC) that enabled clients to manage employee course enrolments in Canvas LMS with licensing restrictions

[MDSL](#) (Remote)

Contract Developer

June 2020 - Sept 2020

- Key Skills: .Net, C#, Php, Docker, Microservices, MS Graph Api
- Converted a VB desktop application for email processing into a C# micro-service
- Migrated, upgraded, containerised, & improved legacy Windows PHP 5.6 Helpdesk application to Ubuntu PHP 7.4

[eSeekMo](#) (Remote)

Founder / Developer

May 2020 - June 2020

- Key Skills: React, Redux, Gatsby
- Created and developed a website that provides application tracking functionality from the applicant's perspective.

[Dixons Carphone](#) (London, UK / Remote)

Contract Senior Software Developer

Dec 2019 - Apr 2020

- Key Skills: Php, Elasticsearch, AWS Fargate, Terraform, Docker
- Enhanced search features and functionality for Curry's E-commerce site
- Developed a module for relevancy testing, utilising the Wilcoxon signed-rank test, to prevent regressions when making changes to the search algorithm.

[CSN Energy](#) (London, UK)

Hands on CTO (UK)

May 2019 – Dec 2019

- Key Skills: .net core, C#, Azure
- Designed the architecture and initiated the development of Weedex UK, a market messaging SaaS platform.
- Developed an interactive demo website for Weedex UK, and supported in-person sales presentations

Previous roles include

Permanent Lead Developer/Hands on CTO at so-sure (2016-2019)

Permanent Senior Backend Engineer/DevOps Lead at PeerJ (2012-2016)

Permanent Hands on CTO at Tangaro (2011-2012)

Contract Senior Powershell/C# Developer at Citrix (2009)

Certifications

[AWS Certified Solutions Architect \(Professional\)](#), [Professional Scrum Master I](#), [Azure Developer Associate](#) [see [LinkedIn Certifications](#) for full list]

Education

[Georgia Institute of Technology](#)

BSc Computer Science

Patents

[Assessing condition of real-world objects](#)

US & EU Patent Approved

Computer skills: Skill (# years experience)

- **Languages:** HTML (22.25), JavaScript (21.5), CSS / Saas (21.25), SQL (18), Batch Files (14), Shell Scripting (11.25), TSQL (10.25), PHP (9.75), C# (8), ASP.Net (7), NodeJS (6.5), Perl (6.5), VB (4.5), Python (3.5), Typescript (2.25), T4 (1.75), PL/pgSQL (1.5), Apex (0.5), Ruby (0.5)
- **Frameworks:** .net Framework (7+), Symfony (7+), Entity Framework (2+), Serverless Framework (1+), Vue.js (1+), Django (<1), Laravel/Lumen (<1), SailsJS (<1), Gatsby (<1), React (<1), Redux (<1)
- **Development Software:** Git (10+), Github (10+), Visual Studio (7+), Phing (5+), Gimp (5+), Source Safe (5+), Xcode (3+), PHP Storm (3+), Tortoise SVN (3+), Azure DevOps (3+), NuGet (2+), Visual Studio Code (3+), Postman (2+), Cruise Control (1+), Nant (1+), Bitbucket (<1), Jira (<1), Gitlab (<1), Octopus Deploy (<1)
- **Libraries:** jQuery (10+), Bootstrap (7+), AWS Api (7+), Payment Gateways (7+), Sixpack (5+), SwiftMailer (5+), Linq (5+), Log4Net (3+), Google Api (3+), Elastica (3+), SQLite (5+), MSMQ (2+), WCF (2+), Webpack (1+), LWC (<1), Visual Force (<1), ExpressJS (<1)
- **Testing:** PHPUnit (3+), Nunit/MSUnit (3+), CasperJs (3+), JMeter (3+), Jest (2+), Cucumber (2+), Nmock (2+), Selenium (2+), Testcafe (1+), Specflow (<1)
- **Servers:** IIS (10+), Apache (7+), HaProxy (7+), Varnish (5+), Nginx (3+), Subversion (3+), ArcServe (3+), Exchange (3+), NTCronD (1+), Opalis Robot (1+), MS ISA Server (1+), Backup Exec (<1)
- **Monitoring/Observability:** Monit (5+), Nagios/Icinga (5+), Rollbar (3+), HappyApps (3+), Pingdom (3+), NewRelic (3+), DataDog (3+), MRTG (3+), Sensu (3+), Sentry (3+), GrayLog (3+), Pushmon (3+), Munin (3+), Sitescope (2+), Grafana (1+), Thundra (<1)
- **DB:** SQL Server (10+), MySQL (7+), Redis (5+), MongoDB (3+), Elastic Search (3+), Kibana (3+), Verity (2+), Postgres (1+), Oracle (<1)
- **DevOps:** Jenkins (7+), Terraform (5+), Ansible (3+), Packer (3+), Puppet (3+), Azure DevOps Pipelines (2+), AWS CDK (1+), Github Actions (<1)
- **Operating Systems / Cloud:** Linux (CentOS/Ubuntu), (15+), Windows (10+), Window Server (10+), Amazon AWS (10+), Mac OSX (10+), Docker (7+), Scalr (3+), Rackspace (2+), Azure (2+), Hadoop / Hive (1+), Novell (1+), MSDOS (1+), Kubernetes (<1), XenServer (<1)
- **Networking:** TCP/IP (15+), FTP (15+), DNS (15+), SMTP (15+), SSL (15+), VPN (7+), DHCP (7+), WINS (5+), SNMP (2+)
- **SAAS:** Google Analytics (7+), Google Tag Manager (3+), HotJar (3+), Optimizely (3+), Mixpanel (3+), Mandrill (3+), Shopify (<1), Postmark (<1), Adobe Analytics (<1)
- **Methodologies/Architectures:** DevOps (10+), Agile/Scrum (10+), Microservices (3+), GraphQL (3+)
- **Data/Documentation:** XML/XSLT (10+), JSON (7+), UML (7+), OpenApi (2+)
- **AWS Services:** IAM (10+), VPC (10+), S3 (7+), Cloudwatch (7+), Route53 (7+), SES (7+), SNS (7+), EC2 (7+), ElasticCache (7+), KMS (7+), Api Gateway (5+), Lambda (5+), RDS (5+), Secrets Manager (5+), Certificate Manager (3+), Cognito (3+), Connect (3+), Database Migration Service (3+), EMR (3+), SQS (3+), EventBridge (1+), Grafana (1+), DynamoDb (1+), Systems Manager (1+), XRay (1+), Cloudformation (1+), ECR (<1), ECS (<1), CodeDeploy (<1), Lex (<1), OpenSearch (<1), CloudTrail (<1), CodeCommit (<1), CodePipeline (<1), EKS (<1), WAF (<1), CodeBuild (<1), CodeArtifact (<1), PCA (<1)
- **Azure:** Enterprise Apps (1+), Storage (1+), Function Apps (<1), Service Bus (<1), App Services (<1), Log Analytics (<1), App Insights (<1), OpenAi (<1), MySQL (<1)
- **CRM/CMS:** Hubspot (3+), Umbraco (2+), Wordpress (<1), MS CRM (<1), Salesforce (<1), Hugo (<1)