

Patrick McAndrew

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GitHub: [urg](#) LinkedIn: [urg98](#) Portfolio: <http://urg.name>

Overview

Highly experienced Senior Polyglot 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/mongo/dynamo

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

[Magellan Consultancy](#) (*Remote*)

Associate

April 2024 - Present

- Key Skills: AWS, Lambda, Node.js, JMeter
- Provided expert IT consulting services to clients, analyzing their technology infrastructure and business requirements
- Developed and implemented IT solutions, to improve efficiency, reduce costs, and meet business objectives
- Implemented persona-based load & stress testing for an OAuth API

[EWG](#) (*Remote*)

Contract Developer

July 2023 - March 2024

- Key Skills: AWS, Lambda, Node.js, OpenApi, Postgres, Terraform, Serverless Framework
- Designed and developed an open banking based secure financial services 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
- Created CI/CD pipelines for testing & deployment using GitHub Actions
- Established a postman collection including pre/post request scripts & tests to perform essential detached JSON Web Signature (JWS) signing and validation processes
- Created an OpenAPI-driven documentation website with sample client code & high quality demo videos to easily onboard clients

[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 CI/CD pipelines in Azure DevOps

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

Contract Developer

Nov 2021 - Mar 2023

- Key Skills: Node.js, 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.js/React) and 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.

Previous selected roles include

Contract Senior Software Developer at Dixons Carphone (2019-2020)

Permanent CTO [*Hands-on*] at CSN Energy (2019)

Permanent CTO [*Hands-on*] at so-sure (2016-2019)

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

Permanent CTO [*Hands-on*] 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 (15+), JavaScript (15+), CSS / Saas (15+), SQL (15+), Batch Files (10+), Shell Scripting (10+), TSQL (10+), PHP (7+), C# (7+), ASP.Net (7+), Node.js (7+), Perl (5+), VB (3+), Python (3+), Typescript (3+), T4 (1+), PL/pgSQL (2+), Powershell Scripts (1+), Apex (<1), Ruby (<1)
- **Frameworks:** .net Framework (7+), Symfony (7+), Entity Framework (2+), Serverless Framework (2+), 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 (10+), 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 (5+), Subversion (3+), ArcServe (3+), Exchange (3+), NTCronD (1+), Opalis Robot (1+), MS ISA Server (1+), Backup Exec (<1)
- **Monitoring / Observability:** Monit (7+), Nagios/Icinga (5+), Rollbar (5+), 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)
- **Databases:** SQL Server (10+), MySQL (7+), Redis (5+), MongoDB (5+), Elastic Search (3+), Kibana (3+), Verity (2+), Postgres (2+), Oracle (<1)
- **DevOps:** Jenkins (7+), Terraform (5+), Ansible (3+), Packer (3+), Puppet (3+), Azure DevOps Pipelines (2+), Github Actions (1+), AWS CDK (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/TLS (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+), Rest (10+), SOAP (10+), Microservices (3+), GraphQL (3+)
- **Data / Documentation:** XML/XSLT (10+), JSON (7+), UML (7+), OpenApi (3+)
- **AWS Services:** IAM (10+), VPC (10+), Cloudwatch (10+), Route53 (10+), SNS (10+), S3 (10+), SES (10+), EC2 (10+), ElastiCache (7+), KMS (7+), Lambda (7+), Secrets Manager (7+), Api Gateway (5+), RDS (5+), SQS (5+), Certificate Manager (5+), Cognito (3+), Connect (3+), Database Migration Service (3+), EMR (3+), DynamoDb (3+), XRay (2+), CloudFormation (2+), EventBridge (2+), ECR (2+), WAF (1+), Grafana (1+), Systems Manager (1+), CodeCommit (1+), PCA (1+), CodeArtifact (1+), ECS (<1), CodeDeploy (<1), Lex (<1), OpenSearch (<1), CloudTrail (<1), CodePipeline (<1), EKS (<1), CodeBuild (<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+), Hugo (1+), Wordpress (<1), MS CRM (<1), Salesforce (<1)