

Patrick McAndrew

Near Queens Road Peckham Station, London SE15

Email: c@urgsystems.com Phone: 01622 37 0924

Twitter: [@urg98](https://twitter.com/urg98) Github: [urg](https://github.com/urg) LinkedIn: [urg98](https://www.linkedin.com/in/urg98) Kaggle: [pmcandrew](https://www.kaggle.com/pmcandrew)

Portfolio: <http://urg.name>

Overview

Highly experienced Senior Polygot Developer/DevOps Engineer/Hands on CTO with expertise in cloud technologies, PHP, Node.js, C#, Python, 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 | 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

[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

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

[so-sure](#) (London, UK)

Lead Developer/Hands on CTO

Feb 2016 – Apr 2019

- Key Skills: AWS EC2, PHP, Mongo, Redis, Ansible, Terraform, Packer
- Architected and developed api and website for mobile phone insurance comprising of visitor, user, claims, partner and admin functionality
- Established business processes related to policy purchase, pricing, connections, cancellation, renewals, anti-fraud measures, claims, and support
- Developed a robust financial reconciliation system that encompassed policies, card transactions (payment gateway and merchant), BACS, and bank accounts
- Implemented procedures for disaster recovery, backups, automatic failovers, server setup/configuration, monitoring, and streamlined one-click build/deploy processes

[PeerJ](#) (London, UK / Remote)

Senior Backend Engineer/DevOps Lead

Sept 2012 – Jan 2016

- Key Skills: AWS, Linux Admin, PHP, Python, MySQL, Varnish, Elasticsearch, Redis
- Developed and seamlessly integrated features for visitors, reviewers, editors, and administrators
- Utilised an open source project to create a prototype document collaboration application using QT and Python
- Created a system for tracking individual article-level metrics using AWS EMR/Hive.
- Ensured a highly responsive website and maintained continuous uptime for PeerJ.com, achieving an impressive uptime of 99.99% throughout 2014

Previous roles include

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](#), [Tensorflow Developer Certificate](#)

Education

[Georgia Institute of Technology](#)

BSc Computer Science

Patents

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

EU Patent Granted (US Pending)

Computer skills: Skill (# years experience)

- **Languages:** HTML (15+), JavaScript (15+), CSS / Saas (15+), SQL (15+), XML/XSLT (10+), Batch Files (10+), Shell Scripting (10+), TSQL (10+), PHP (7+), C# (7+), ASP.Net (7+), NodeJS (5+), Perl (5+), Classic ASP (3+), VB (3+), Wscript/VBScript (3+), COM (3+), Python (3+), CFML (2+), Typescript (1+), T4 (1+), WMI (1+), Jscript (1+), Silverlight (1+), SSIS (1+), Java (<1), DTS (<1), QT (<1), Objective C (<1), Apex (<1), C/C++ (<1), Ruby (<1), PL/SQL (<1)
- **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), MS Sync Framework (<1)
- **Development Software:** Git (10+), Github (10+), Visual Studio (7+), Komodo Edit (5+), Phing (5+), Gimp (5+), Source Safe (5+), Xcode (3+), PHP Storm (3+), Tortoise SVN (3+), Clubhouse (3+), Interdev (3+), Eventum (3+), NuGet (2+), Visual Studio Code (3+), Cruise Control (1+), StyleCop (1+), Azure DevOps (2+), Nant (1+), FXCop (1+), Crystal Reports (1+), Bitbucket (<1), Jira (<1), Perforce (<1), Ncover (<1), Gitlab (<1), MS TFS (<1), Octopus Deploy (<1), Win Phone 7 (<1)
- **Libraries:** jQuery (10+), Bootstrap (7+), AWS Api (7+), Payment Gateways (7+), Sixpack (5+), SwiftMailer (5+), Linq (5+), Log4Net (3+), MS Enterprise Lib (3+), Asp.Net Membership (3+), Google Api (3+), Elastica (3+), SQLite (3+), MSMQ (2+), Asp.Net AJAX (2+), Ajax Control Toolkit (2+), WCF (2+), ManagedWinapi (1+), Webpack (1+), JQuery Tools (1+), Flowplayer (1+), Telerik Ajax (<1), LWC (<1), Visual Force (<1), Peewee (<1), ExpressJS (<1), Nhibernate (<1), csdialup (<1), HardwareHelperLib (<1), ManagedPipe (<1), Zedgraph (<1), Shinobi Charts (<1), NeatUpload (<1)
- **Testing:** PHPUnit (3+), Nunit/MSunit (3+), CasperJs (3+), Cucumber (2+), Nmock (2+), Selenium (2+), RhinoMocks (1+), Testcafe (1+), Jest (1+), Mocha (<1), Specflow (<1), Moq (<1)
- **System Software:** SQL Server (10+), IIS (10+), Apache (7+), HaProxy (7+), Jenkins (7+), Varnish (5+), Redis (5+), Monit (5+), Nagios/Icinga (5+), MySQL (7+), MS VSS (5+), Ansible (3+), Nginx (3+), Terraform (3+), MongoDB (3+), Elastic Search (3+), Kibana (3+), Packer (3+), MRTG (3+), Subversion (3+), Sensus (3+), GrayLog (3+), Puppet (3+), Jmeter (3+), Munin (3+), ArcServe (3+), Exchange (3+), Cold Fusion (2+), Umbraco (2+), Allaire Forums (2+), Verity (2+), Sitescope (2+), hMailServer (2+), CDK (1+), Grafana (1+), NTCronD (1+), Opalis Robot (1+), MS ISA Server (1+), Postgres (1+), Wordpress (<1), Backup Exec (<1), Oracle (<1), MS CRM (<1), XenServer (<1)
- **Operating Systems / Cloud:** Linux (CentOS/Ubuntu), (15+), Windows (10+), Window Server (10+), Amazon AWS (10+), Mac OSX (10+), Docker (5+), Scalr (3+), Rackspace (2+), Azure (1+), Hadoop / Hive (1+), Novell (1+), MSDOS (1+), Kubernetes (<1)
- **Networking:** TCP/IP (15+), FTP (15+), DNS (15+), SMTP (15+), SSL (10+), VPN (7+), Ethernet (7+), DHCP (7+), WINS (5+), T1/T3 (2+), SNMP (2+), WLAN (2+), DSL (1+), IPX (1+), Token Ring (<1)
- **SAAS:** Google Analytics (7+), Rollbar (3+), HappyApps (3+), Google Tag Manager (3+), DataDog (3+), HotJar (3+), Optimizely (3+), Mixpanel (3+), Hubspot (3+), Pingdom (3+), NewRelic (3+), Sentry (3+), Mandrill (3+), Pushmon (3+), Shopify (<1), Thundra (<1), Salesforce (<1), Adobe Analytics (<1)
- **Methodologies/Architectures:** DevOps (10+), Agile/Scrum (10+), Microservices (2+)
- **AWS Services:** IAM (10+), VPC (7+), 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)