Patrick McAndrew

Near Queens Road Peckham Station, London SE15
Email: c@urgsystems.com Phone: 020 3290 5520
Github: urg LinkedIn: urg98 Portfolio: http://urg.name

Overview

Highly experienced Senior Polyglot Developer/Product Engineer/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 | 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

Truveal (Remote)   **Consultant**
Dec 2019 - Present
- Technologies included: Node, Typescript,.Net, Php, Docker, AWS Fargate/
  Lambda/EKS/DynamoDb, Vue, React, Azure Pipelines, Github Actions,
  Salesforce, Shopify, OpenApi, CDK
- Clients included: EWG, BP, Wray Castle, MDSL, Dixons Carphone, Nibble
- 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
- Developed and integrated features in a Global Payments micro-service APIs
  for 3DS, Core Payment, and Mastercard Adapter
- Successfully migrated an OpenAI PHP application into Azure
- Led implementation of a reporting micro-service, which was developed to
  ensure zero impact on production API response time
- Introduced & Implemented DevOps practices to an AI Chatbot Company by
  setting up pipelines, Infrastructure as Code (IaC), containerising application,
  & implement Kubernetes
- 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
- Converted a VB desktop application for email processing into a C# micro-
  service
- Created and developed a website that provides application tracking
  functionality from the applicant's perspective.
- Improved 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**
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.

Previous selected roles include
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   **EU Patent Granted (US Pending)**

Last Updated: 2024-09-20

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+), NodeJS (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+), ElasticCache (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)