Michael "Crispy" Crispen

Colorado Springs, Colorado 80908 Available for Relocation

Phone: (724) 988-8754 | Email: <u>mcrispen@crispywebservices.com</u> LinkedIn: <u>https://www.linkedin.com/in/michael-crispen/</u> Website : <u>https://www.crispywebservices.com/</u>

Objective

Innovative and results-driven software engineer with extensive experience in cloudnative application development, seeking a challenging Developer role to leverage expertise in designing, developing, and deploying scalable, secure, and highperformance web and cloud applications. Committed to delivering cutting-edge solutions that drive business innovation and operational efficiency.

Certifications

- AWS Certified Solutions Architect Associate
- AWS Certified Developer Associate
- AWS Certified SysOps Administrator Associate
- AWS Certified AI Practitioner

Professional Experience

Amazon Web Services (AWS) — Cloud Application Developer

July 2019 – March 2025

- Designed and built scalable, full-stack applications from end to end, collaborating directly with engineering and C-suite teams to align technical solutions with business objectives.
- Collaborated with clients across diverse industries, including gaming, automotive, medical, banking, and government, to design and implement cloud solutions tailored to industry-specific challenges and compliance requirements.
- Led a high-performing delivery team working with AAA gaming studios worldwide, improving deployment efficiency and operational workflows.
- Architected and implemented serverless solutions using AWS services (Lambda, API Gateway, DynamoDB, S3, and Step Functions), ensuring high availability, cost efficiency, and reduced operational overhead.

- Led the development of cloud-native applications, optimizing solutions for performance, scalability, and reliability, resulting in improved user experience and lower infrastructure costs.
- Enhanced CI/CD pipelines using AWS CodePipeline, CodeBuild, and Jenkins streamlining software releases.
- Delivered technical workshops on cloud architecture, security best practices, cost optimization, and DevOps methodologies, collaborating with leadership, management, infrastructure, security, and development teams to drive cloud adoption and best practices.

Edinboro University of Pennsylvania — Computer Technician

January 2015 – May 2019

- Installed and maintained systems and software for faculty and students, ensuring security and performance.
- Provided hardware and software troubleshooting, resolving complex issues promptly.
- Conducted system reformatting, malware removal, and configuration updates to enhance usability.

Education

Amazon Web Services Tech U

Graduated: December 2019

- Completed a rigorous six-month accelerated program focused on AWS technologies and professional development
- Participated in hands-on classroom training led by AWS certified instructors covering core AWS services, architecture principles, and implementation best practices
- Collaborated in a team of 4 on a comprehensive Capstone project, designing and developing a cloud-native solution that addressed real-world business challenges
- Successfully presented and defended the Capstone project to a panel of senior AWS engineers and stakeholders, demonstrating technical proficiency and solution architecture skills
- Gained expertise in AWS solution design, implementation strategies, and cloud optimization techniques applicable to enterprise-level applications

• Acquired practical knowledge in cloud security, compliance frameworks, and cost optimization strategies for AWS environments

Edinboro University of Pennsylvania

Graduated: May 2019

- Bachelor of Science in Computer Science
 - Focus: Web Development and Implementation
 - o Minor: Business Administration
 - Relevant Coursework: Cloud Computing, Networking, Web Development, Data Structures, Algorithms

Technical Skills

Programming Languages: Python, C++, JavaScript, TypeScript, Java, C#, Go, PHP, SQL, R

Web & Frontend Technologies: React, Vue.js, Angular, Next.js, HTML5

Backend & Server-Side Technologies: Node.js, Express.js, Django, Flask, FastAPI, Spring Boot, GraphQL, gRPC, WebSockets, Turn/Stun, WebRTC

API Development: RESTful APIs, GraphQL, OpenAPI/Swagger, Postman, API Gateway, JSON, XML, Protocol Buffers

Cloud Platforms: AWS (EC2, S3, RDS, Lambda, DynamoDB, ECS, EKS, CloudFront, IAM, SNS, SQS)

Containerization & Orchestration: Docker, Kubernetes, Docker Compose

Infrastructure as Code: Terraform, CloudFormation

CI/CD Tools: Jenkins, GitHub Actions, AWS CodePipeline

Monitoring & Observability: CloudWatch, Prometheus, Grafana, ELK Stack (Elasticsearch, Logstash, Kibana), Datadog, Splunk

Database Technologies: PostgreSQL, MySQL, MongoDB, Redis, SQLite, MariaDB, Oracle

Machine Learning & Al: TensorFlow, PyTorch, NumPy, Pandas, SciPy, OpenCV, Recurrent Neural Networks (RNNs), Convolutional Neural Networks (CNNs), Natural Language Processing (NLP), Computer Vision, Predictive Analytics **Game Development Technologies:** Unreal Engine (UE4/UE5), Godot, Multiplayer Networking (WebSockets, gRPC), Game Physics, Asset Streaming, Performance Profiling

Security & Compliance: IAM Policies, Security Groups, OAuth, JWT, SAML, Penetration Testing, Network Security, Encryption Techniques, Compliance Frameworks (GDPR, HIPAA)

Systems & Network Administration: Linux (Ubuntu, CentOS, Debian), Windows Server, Virtualization (VMware, VirtualBox, Hyper-V), Network Configuration, Backup & Disaster Recovery, Shell Scripting (Bash, PowerShell)

Version Control: Git, GitHub, GitLab

Additional Tools & Technologies: Agile Methodologies (Scrum, Kanban), Technical Documentation, CDN Optimization, Performance Tuning, Troubleshooting, Technical Writing

Development Methodologies: Agile, Scrum, Kanban, DevOps, Test-Driven Development (TDD), Continuous Integration/Continuous Deployment (CI/CD)

Projects

2 TB Real-Time Messaging Stream

• Developed a high-performance, serverless content-based routing system using AWS services. Achieved higher scalability and cost efficiency compared to standard solutions like Amazon EventBridge. Enabled adding data subscribers or producers with new data flowing through in under 30 seconds.

Autoscaling Pixel Streaming Solution

• Designed and implemented an autoscaling pixel streaming architecture for Unreal Engine, enabling seamless game streaming with dynamic resource allocation.

Resident Architect for Optimization

• Served as the lead architect for a AAA gaming studio, optimizing server and database performance. Reduced compute costs by 60% while maintaining high availability.

Live Operations Game Development

• Designed a global architecture supporting live operations for a AAA game studio. Achieved 99.999% uptime during deployment, ensuring seamless global connectivity.

Vtuber Bot Development

• Created a Vtuber bot utilizing RNN networks to learn and play games. Integrated synthesized voice and combined multiple bots feeding into a response controller, providing dynamic and interactive gameplay responses.

References

<u>Dan Pavatich</u> Co-Founder @ Zeppta <u>Dan@zeptta.com</u>

Rani Lian Delivery Practice Manager @ Amazon Web Services <u>mranilian@amazon.com</u>

<u>John Skinner</u> Senior Support Consultant @ Icertis <u>john.skinner@icertis.com</u>

<u>Brandon Mattei</u> Systems Administrator @ V&R Solutions 707-486-1812 <u>bmattei@vnrsol.com</u>