Will Musgrave

will@willmusgrave.com — willmusgrave.com — LinkedIn — GitHub — CertDirectory

Data Architect with 5+ years designing cloud-native data platforms on Azure and AWS, specializing in Kubernetes, infrastructure as code, and ELT/ETL pipelines. Proven track record delivering scalable solutions with strong data governance and security compliance across healthcare, supply chain, and sports analytics.

Experience

BlueNode Inc. (acquired by Everstream Analytics)

May 2022 - Present

Data Architect

Hybrid Full-Time - Halifax, Nova Scotia, Canada

- Created serverless Azure Functions (Python, C#) for ML- and NLP-driven data cleansing, orchestrated ELT workflows with Apache Airflow and dbt on AKS delivering to Power BI; led BNSuite deployment to Canadian ports and engineered Transport Canada OCR solution reducing costs from \$120K to \$3K with 80%+ data extraction.
- Architected and managed Azure infrastructure as code with Terraform, including Azure Policy, resource locks, and least-privilege security, integrated with CI/CD via GitHub Actions, improving Microsoft Defender for Cloud scores from 30% to 80%; served as CSO during Government of Canada innovation contracts and drove BNSuite inclusion in Everstream's SOC 2 Type II compliance.

ShiftKey Labs

May 2025 - June 2025

 $Technical\ Instructor$

Part-Time In-Office - Halifax, Nova Scotia, Canada

• Taught Azure fundamentals to 115 post-secondary students covering Entra ID, Infrastructure as Code (ARM, Bicep), Azure networking, and Azure Monitor, preparing them for Azure certification; integrated soft skills assessments including certification planning, role-aware communication, OKR development, and personal branding.

JackHabbit

Jan 2021 - May 2022

Software Developer - Machine Learning

Remote Full-Time - Halifax, Nova Scotia, Canada

- Led production deployment of growth management system to Studentcare ASEQ, delivering value to 1M+ students; engineered backend services with Django, MySQL, and Docker, implementing CI/CD to AWS ECR/ECS and building scalable cloud infrastructure.
- Engineered ML-powered personalized recommendation service directing students to content and support services; spearheaded privacy-by-design efforts by co-developing privacy impact assessments and data classifications with Bamboo Data Consulting.

resulta

Jan 2019 - Jan 2021

Statistical Analyst

In-Office Full-Time - Halifax, Nova Scotia, Canada

- Designed and deployed production-ready self-service reporting platform with Django and jQuery, streamlining on-demand data access for editorial teams and reducing ad-hoc data requests by 80%.
- Mined historical sports data using MySQL and Python to uncover trends for editorial content supporting major partners including OddsShark, ESPN, Sports Illustrated, and Sportsnet; collaborated with R&D team to prototype real-time tennis odds models using statistical modeling techniques.

Self-Employed & Sylvan Learning Center / Dalhousie University

May 2015 - Jan 202

Science & Math Tutor / Technical Instructor

Part-Time & Contract - Halifax, Nova Scotia, Canada

• Tutored students in physics, mathematics, calculus, and statistics; helped adult learner complete GED after decades away from education and supported high school student with math anxiety to achieve admission to St. Francis Xavier University's nursing program. Created applied physics course for Naval Fleet School Atlantic aligned with IMO standards as part of DND contract.

Medical Physics Assistant (Quality Assurance)

Designed and executed data validation and quality assurance workflows for radiation treatment planning systems, analyzing dose distribution metrics to ensure data accuracy and precision; implemented automated calibration and monitoring processes to maintain system reliability and data integrity.

Skills

- Cloud & Infrastructure: Azure, AWS, Azure Kubernetes Service (AKS), AWS ECS, Azure Functions, Terraform, ARM Templates, Bicep, Helm, Linux, Windows Server, macOS
- **DevOps & Orchestration:** Kubernetes, Docker, Azure ACR, AWS ECR, GitHub Actions, Bitbucket Pipelines, Flux, ArgoCD, Git
- Programming & Data Engineering: Python, Bash, PowerShell, Go, JavaScript, SQL, PostgreSQL, MongoDB, MySQL, Redis, Apache Kafka, Apache Spark, dbt, Apache Airflow, Power BI, Microsoft Fabric, ETL/ELT pipelines, data warehousing
- Data Science & Machine Learning: ML, NLP, MLOps, Pandas, NumPy, scikit-learn, TensorFlow, PyTorch, PySpark, Azure Document Intelligence, Azure AI Speech
- Security, Governance & Observability: Microsoft Defender for Cloud, Azure Key Vault, Entra ID, RBAC, PIM, MFA, NSGs, Private Endpoints, Azure Firewall, Kubernetes Network Policies, Istio, Azure Policy, Purview, SOC 2, Prometheus, Grafana, Azure Monitor, Log Analytics Workspace, Azure Cloud Adoption Framework, Well-Architected Framework
- Methodologies & Leadership: Agile, Scrum, cross-functional collaboration, stakeholder communication, mentorship, code reviews

Certifications

- Microsoft: Microsoft Certified: Azure Solutions Architect Expert, Microsoft Certified: Azure Administrator Associate, Microsoft Certified: Security, Compliance, and Identity Fundamentals, Microsoft Certified: Azure AI Fundamentals, Microsoft Certified: Azure Data Fundamentals, Microsoft Certified: Azure Fundamentals
- The Linux Foundation & Cloud Native Computing Foundation: Golden Kubestronaut, Kubestronaut, CKS: Certified Kubernetes Security Specialist, CKA: Certified Kubernetes Administrator, CKAD: Certified Kubernetes Application Developer, CGOA: Certified GitOps Associate, CCA: Cilium Certified Associate, KCA: Kyverno Certified Associate, PCA: Prometheus Certified Associate, CAPA: Certified Argo Project Associate, ICA: Istio Certified Associate, LFCS: Linux Foundation Certified System Administrator, CBA: Certified Backstage Associate, OTCA: OpenTelemetry Certified Associate, KCSA: Kubernetes and Cloud Native Security Associate, KCNA: Kubernetes and Cloud Native Associate
- Other: AWS Certified AI Practitioner AWS, HashiCorp Certified: Terraform Associate (003) HashiCorp, Astronomer Certification for Apache Airflow 3 Fundamentals Astronomer, Astronomer Certification DAG Authoring for Apache Airflow 3 Astronomer, Professional Scrum Developer I Scrum.org (verify with will@jackhabbit.com)

Education

Master of Science - MS, Medical Physics

2015 - 2017

Dalhousie University

Halifax, Nova Scotia

• Thesis: Dosimetric Effects of Prostate Calcifications in High-Dose-Rate Brachytherapy Calculations

Combined Honours, Physics and Mathematics

2010 - 2015

University of King's College

Halifax, Nova Scotia

• First Class Honours, Certificate in Information Technology - GPA: 3.67/4.30