

# Grant Zukel

## Python Engineer / Lead Devops Architect - Insight Global / AT&T

Commerce City, CO 80022

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Senior DevOps / Lead Architect professional seeking a senior role in a challenging, fast paced, evolving DevOps environment. Looking to further my career and move into more of a Senior DevOps / Management role. Looking to work in a dynamic and challenging environment where there is an opportunity of self-improvement both personally and professionally. Ultimately furthering the development of my career and of the organization. I embrace challenges and meet them head on. When I don't know how to do something, I find the answer. When I have a deadline, I will do everything humanly possible to meet that deadline. Personally, I have a strong desire to leave things in a better state than I found them. Thus, over time I will analyze and suggest improvements in efficiency for whatever position I'm in. When you do something, you should do it in a way that improves upon what is already there. My personal motto is: "What man is a man who does not make the world a better place".

I possess great passion for DevOps. My aspirations led me to start a company, iDevops. My company takes in ambitious interns that share the same love for the career field. The mission is to train future DevOps Engineers of varying backgrounds to meet and exceed the challenges presented in developer, testing, and production environments. We have successfully placed 2 candidates into DevOps positions. One has gone on to become a DevOps lead before having a year's experience in the field. I want to share my passion for DevOps with others. That is why choosing me would be a great choice for your company. I bring a dynamic set of experiences, knowledge, and understanding in to any environment I go to. I am truly outside the box.

Authorized to work in the US for any employer

### WORK EXPERIENCE

#### **DevOps Engineer / Python Engineer -> Lead Devops Architect**

Insight Global / AT&T - Remote -

2016-09 - Present

Started as a Python Engineer to create automation around building install-able python packages with pre-packaged libraries. Promoted into Lead Devops Architect for Common Machine Learning Platform team. I was promoted to lead the strategic vision for ATT&T Machine-learning DevOps. After performing well in this position I was again moved to another team to lead the strategic platform vision as a whole for all of ATT&T and made a tech lead for the Kafka and Python automated Kubernetes deployment templates.

- Created a general service template that automated service template generation so new developers didn't have to understand the structure. They could simply provide a docker image name and it would create a seed for them.
- Created custom python logging framework that turned all logging for Django / Flask and python into a json object intercepting Django and Flask requests with custom middleware.
- Created a python rest service that published and subscribed to kafka topics using flask.
- Successfully: architected, developed, automated, and employed application pipelines using ATT&T platform and helped drive the design of which used a combination of: In hose front end, Docker, Jenkins, Bitbucket, and Kubernetes for: Kafka, Storm, Generic Python Micro-service Using Django & Flask for both Python 2 and 3, Machine learning Micro-service using Django & Flask for both Python 2 and 3, Machine learning micro-service

using Django and R, and a Chatbot that controlled K8S environments from a messaging platform internal to ATT&T.

- Python Software Security Manger responsible for resolving any security flaws in python for all python applications within ATT&T.
- Created self-healing auto Kubernetes Nodeport assignment system to facilitate being able to specify random available NodePorts based on availability when hardcoding a port is required for a service. The service would self-heal if Kubernetes assigned the port before the service was created until the desired number of services with hardcoded ports are available and created.
- Created chatbot to control Kubernetes environments from proprietary ATT&T chat system.
- Designed, Architected, and Created a Kafka Subscriber service that maintains a micro-service catalog and uses Kafka metadata messages to update and register versioned services in the catalog according to the metadata.
- Helped lead the strategic DevOps vision for Common Machine Learning Automation & Platforming.
- Developed automated testing for Python Django Common Rest Service, Python Flask Rest Service, Python Machine Learning Rest Service, Kafka, Storm, R Common Rest Service.
- Created Common Service Templates for Kubernetes deployments of Python Django Common Rest Service, Python Flask Rest Service, Python Machine Learning Rest Service, Kafka, Storm, R Common Rest Service.
- Diagnosed and Troubleshooted errors in all common services templates I created which included troubleshooting and resolving errors in: Kubernetes, Jenkins, Code Cloud, Docker, Nexus, In House Front End to resolve customer issues with services.
- Integrated Kerberos, Hive, HDSF, Hadoop, into Python Machine Learning Template.
- Created automated way of creating install-able python packages using ATT&T proprietary package manager leveraging Anaconda.
- Create user on demand install-able python package that integrated with Anaconda private repository only allowing users to download from an internally hosted repository on demand.
- Created automated package around installing and configuring anaconda enterprise notebook server and repository.
- Created managed, modified, supported R, and RCloud server for ATT&T.
- Created managed, modified, supported R, and RCloud server for ATT&T.
- Created multiple documentation pages, and videos detailing how things work and integrate as I am 1 of 5 people who knew who everything worked.
- Participated in the interviewed, hiring, and training process of two employees to support job functions I am handling within the company.
- Worked on 5 different teams doing 5 different jobs as a single person to drive ATT&T's vision.
- Created multiple architectural design documents using UML and other diagram languages.
- Created support chat bots for the seeds I created that integrated with ATT&T's messaging system to help user find answers to their questions about the seeds without having to ask a person or refer to documentation.
- Created SDK to easily call machine learning services abstracting the user from the difficult nature of it to make it simple and repeatable.
- Designed pass through security system to work as a proxy security passing session cookies to back end services.
- Architected changes to platform that drastically increased usability and decreased support problems.
- Led a group of 3 other Devops Engineers to complete tasks, and participate in daily scrums.

## **CEO**

ldevops.io -

2016-02 - Present

Created Idevops.io to guide, teach, and grow individuals into productive DevOps Engineers. Idevops.io acts as a recruiting agency that works on a volunteer internship program where interns go through rigorous DevOps training to be productive DevOps Engineers.

- Taught Lance Zukel, and got him hired at Charter Communications where he preformed so well he was made the lead of OPS. He later moved to ATT&T for more money and now leads the DevOps division I left to lead the strategic vision as a whole.

- Currently 7 other interns are going through the program. Instruction and Mentorship are provided every night between 8pm PST - 12 AM PST.

- Taught Tou Vang who became a Continuous Delivery Engineer for Hitachi.

- Guiding Interns through creating Django based student portal that will act as a shopping guide for hire-able DevOps interns detailing all the work they do.

- Guiding Interns through creating a video teleconferencing system using JS and python for the school to leverage as Open-source.

## **DevOps Engineer**

Kenzan Media -

2015-06 - 2016-08

Acted as Lead Consultant on client cloud migration with 350,000,000 dollars of client business on the line.

- Successfully: Architected, developed, automated, and employed application pipelines for: Kafka, Elasticsearch, Elasticsearch Data, Storm, and Zookeeper using Terraform and Ansible for customer project.

- Lead daily scrum meetings with clients to ensure deliverable and target objectives were being met.

- Preformed and developed performance and stability testing, around customer architecture for all levels of environments.

- Used Ansible to automate and configure AWS AMI application builds.

- Created Ansible playbooks to configure and update infrastructure.

- Worked as a consultant to establish a strong working relationship with clients, and identify project requirements.

- Client SME for Kafka, Elasticsearch, Storm, and Zookeeper.

- Configured and Automated VPC/Direct Connect/VPN connections in AWS using boto and Terraform.

- Designed, architected, developed, and implemented data pipeline project to verify and deliver critical customer data consistently, reducing delivery time from 3 days to 1.5 hours.

- Created python scripts for Kafka management from Jenkins.

- Created python scripts to automate security group creation and management from state files versioned in Github.

- Created metrics monitoring scripts that saves metrics to configurable elasticsearch, PostgreSQL, and or SQLite base on configuration.

- Created an active directory employee management portal.

- Created RESTful data loading service called from Jenkins to load elasticsearch from s3 buckets.

- Created python scripts to automatically generate Ansible automation playbooks for application configurations.

- Created a series of supporting scripts to automate daily tasks.

- Created a Kafka, Storm, Zookeeper application cluster discovery configuration platform, which automatically creates manages and maintains AWS route53 addresses and application configs files ensuring all applications start in sync and discover each other separated by a unique cluster\_id system.

- Designed multiple Jenkins DSL configurations to support automated infrastructure pipelines.

- Created python scripts to inventory, automate, and test security groups in AWS.

## **Remote DevOps Engineer**

Lifetime Fitness Media and Events -

2014-12 - 2015-06

- Developed amazon cloud formation templates and chef recipes to provision application architecture.
- Developed Nagios alerts in Python to perform basic monitoring, functional test, external service monitoring, and AWS Alerting.
- Lead expert on Elasticsearch.
- Built new Elasticsearch cluster using AWS cloud formation and chef helping to identify query performance issues allowing the developers to fine tune query performance substantially increasing speed while decreasing instance size using an apache proxy for basic authentication.
- Managed and Troubleshoot CI release pipeline application deployments.
- Automated various deployment and management tasks to provide granular control to non-technical stakeholders.
- Participated in scrum meetings, received scrum training.
- Created dynamic AWS CloudFormation stacks using a Ruby based CloudFormation DSL. A typical stack would leverage many different AWS resource types: VPC, EC2, Auto-Scaling, S3, CloudFront, RDS, ElastiCache, etc.
- Created Backup solutions for: MongoDB, Neo4j, and Elasticsearch that pushed backups to S3 and allow developers to restore to the different environment types such as QA, DEV, or Prod.
- Created MSSQL and Microsoft ASP.net performance counter monitors utilizing PowerShell scripts and NRPE.
- Helped trouble shoot and resolve Neo4j failures and backup issues.
- Participated in on call rotation.

## **DevOps & Python Developer**

Enki Corporation -

2014-04 - 2014-12

- Configured two Ubuntu OpenLDAP servers with replication.
- Configured Microsoft Active Directory Server
- Configured Microsoft Domain Controller
- Managed, developed, and designed a dashboard control panel for customers and Administrators using Django, OracleDB, PostgreSQL, and VMWare API calls.
- Maintained Oracle, and PostgreSQL databases.
- Wrote multiple programs in Python to monitor virtual machine usage utilizing VMWare API calls.
- Wrote a program to monitor Virtual Machine performance data using VMWare API's.
- Wrote a program to use REST API calls to interface with Veeam backup server, and parse output reports of an excel file in python to monitor customer backup usages.
- Learned python in 3 months to a proficient level.
- Researched various Network, Storage, Compute technologies, and IaaS provisioning software to include: CloudStack, OpenStack, OnAPP, NetIQ, and BMC.

EDUCATION

## **BA in Philosophy**

American Military University

2017-10

## **BS in Electrical Engineering**

American Military University

2018-01

### SKILLS

Python, C#, BASH, Linux, Visual Basic, HTML, Javascript, Java, Objective C, Command Line, PHP, Amazon Web Services, Automation Development, System Administration, Systems Engineer, Instructor, R, Ruby, Jenkins, Elasticsearch, Kafka, Zookeeper, Kubernetes, Machine Learning, Chatbots, Devops, Prometheus, ELK, Apache, Nginx, Application Development, Web Development, Vmware, Virtualization, Docker, Vagrant, Chef, Windows, Agile, Jenkins DSL, PostgreSQL, Django, Flask, Ansible, Boto, Terraform, Git, SVN, Phantom JS, Unity Game Development, IIS, Storm, Nagios, Active Directory, HDFS, Kerberos, Hive, Hadoop, Japanese, Chinese

### LINKS

<https://www.linkedin.com/in/grant-zukel-35675258/>

### MILITARY SERVICE

Service Country: United States

Branch: United States Airforce

Rank: E4

2007-08 - 2013-08

MQ-9 / MQ-1 UAV sensor operator (1U051)

U.S Air Force

2007 to 2013

- Maintained multiple MySQL databases, web server software, and hardware on JWICS TS/SCI network.
- Analyzed LAN based networked computer memory and resource allocation.
- Developed VB.net program responsible for interfacing with data feeds which resulted in a 40% increase in efficiency.
- Developed, implemented, and maintained PHP based website assisting in the de-confliction of emergency mission management and aircraft altitudes utilizing MySQL databases and ESD aircraft streams via TCP/IP protocols.
- Developed, implemented, and maintained VOIP technical documentation.
- Developed and maintained VB based countdown timer for mission operations.
- Developed and maintained VB.net based automatic logon support for specific squadron website.
- Wrote VB.net programs to allow sensor operators to pull sensor payload data from other aircraft increasing efficiency of mission support.
- Instructed and Evaluated all new MQ-9 Sensor Operators for mission qualifications for the 17th and 867th Air force squadrons.

- Designed Air force 867th squadron Patch.
- 4000+ combined combat mission flying hours.

#### CERTIFICATIONS/LICENSES

#### **Python 2.X Cert from ExpertRating.com**

Present

Python 2.x Test. ExpertRating is an ISO 9001:2015 company that offers hundreds of popular certifications suitable for students, professionals, job seekers and companies. See where ExpertRating Certified Professionals are working.

Taking this highly recognized certification is an excellent way for you to prove your professional prowess to employers while giving a boost to your resume. Over 2,700,000 people in 160 countries have benefited from ExpertRating Online Certifications.