

# UlugBeck Nurmatov

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## Summary

U.S. Citizen with MS in Cybersecurity & DevOpsSec Architect  
El Cerrito, California, United States

### Summary

DevOpsSec Architect with 20+ years of experience in the USA. Proven ability to design, develop, and implement innovative security solutions that seamlessly integrate with DevOps pipelines (#DevOps, #DevSecOps, #SecurityPipeline) to safeguard organizations from evolving cyber threats (#Cybersecurity). Skilled in leveraging AI for threat detection (#AI, #ThreatDetection) and cloud-based infrastructure security (#CloudSecurity, #CloudNativeSecurity).

Extensive experience with VMware virtualization technologies, including vSphere, vCenter, and ESXi.

In-depth knowledge of OpenShift container platform, Kubernetes orchestration, and containerization concepts.

Proficiency in Python scripting with experience developing automation scripts for infrastructure management and deployment.

Strong understanding of networking, storage, and security principles in virtualized and containerized environments.

Keywords #DevOpsSecurity, #DevSecOpsEngineer, #CloudSecurityArchitect, #InfrastructureSecurity, #CI/CDSecurity, #ThreatModeling, #VulnerabilityManagement, #ComplianceAutomation

### Skills

DevSecOps: Integrating security throughout the SDLC (#SDLC)

AI for Cybersecurity: Threat detection, anomaly analysis, incident response automation

Cloud Security Architecture: AWS, Azure, GCP security best practices

Infrastructure as Code (IaC): CloudFormation, Terraform (security focus)

DevOps Automation (Security Focus): CI/CD Pipelines, Infrastructure as Code, Containerization

Linux/Windows Administration (Security Focus): Scripting for secure deployments

Security Compliance: PCI, HIPAA, SOX compliance and automation

Technical Leadership: Leading and mentoring secure development teams

Collaboration: Working effectively with cross-functional teams

Programming: Python, Ruby/Rails, scripting languages for automation

Cloud Technologies (Security Focus): AWS, Azure, GCP with security best practices

Containerization (Security Focus): Kubernetes, Docker Swarm

Data Security: Secure data access and management

Big Data Security: Securing big data pipelines and infrastructure

Security Frameworks: NIST, COBIT, ISO 27005

## Experience

### Cybersecurity AI Architect

TAITAN LLC

Jan 2023 - Present (1 year 5 months)

Led the development of an AI-powered threat detection system, reducing cyberattack response time by 60% and saving an estimated \$500,000.

Architected a secure cloud platform (e.g., Microsoft Azure) with Terraform, reducing security incidents by 25%.

Championed secure infrastructure provisioning with Terraform.



## **Architect & Cybersecurity DevSecOps Engineer**

Blue Origin

Oct 2022 - Jan 2023 (4 months)

Project Highlights:

Project EAST: Designed a secure rocket component emulator, reducing hardware testing costs by 15%.

CI/CD Automation with Security: Streamlined development with secure GitLab/Portainer CI/CD pipeline, achieving a 50% reduction in build and deployment times.

Secure Development Practices: Implemented MVC design with TDD, BDD, and security considerations, enhancing code quality and security posture.

Moon Landing Security: Collaborated on secure development of cutting-edge propulsion systems (BE-7, BE-3, BE-4).

Secure Portainer Infrastructure: Designed a user-friendly and secure Portainer infrastructure for development teams.

ML & AI with Data Security: Integrated Kibana, Elasticsearch, and Selenium Docker with a focus on secure data access.



## **DevOps-DevSec Architect & Scrum master**

Cobham Satcom

May 2022 - Sep 2022 (5 months)

Built secure Kubernetes infrastructure on bare-metal servers.

Integrated LEO/MEO satellite modules into the IoT network within Kubernetes, ensuring secure communication.

Enhanced security posture with NIST standards, reducing vulnerabilities by 15%.

Streamlined secure development with GitLab/Elasticsearch, Jenkins/GitLab CI/CD, and Docker API security.

Automated infrastructure with Ansible & Portainer, migrated to the cloud using Terraform with a focus on security throughout the process.

Delivered projects on time and within security compliance as Scrum Master.



## **DevOps Architect**

Elexity

Sep 2021 - Dec 2021 (4 months)

Built a secure and scalable #cloud-native infrastructure using Docker, Kubernetes, and Terraform. (#CloudSecurity, #CloudNativeSecurity)

Integrated monitoring tools (Nagios, Prometheus, Kibana, Grafana) for real-time infrastructure health insights (#Monitoring, #CloudMonitoring)

Orchestrated CI/CD pipelines (Jenkins, GitLab) for automated deployments, achieving a 20% reduction in deployment times. (#CI/CD, #DevOpsAutomation)

Championed security by enforcing access control (Bitbucket API policies, Kubernetes RBAC) and integrating Slack alerts for critical logs. (#SecurityCompliance, #DevSecOps)

Designed and deployed highly resilient infrastructure across a hybrid cloud environment for enhanced fault tolerance. (#CloudArchitecture, #HybridCloud)

Utilized HELM3 for managing Kubernetes applications and AWS-CLI for efficient Linux instance configuration. (#Kubernetes, #CloudManagement)

Proactively collaborated with end-users to ensure secure deployment practices. (#Collaboration, #DevSecOpsCulture)

Troubleshooted complex issues like EE web domain and Google integration problems. (#Troubleshooting, #FullStackDevelopment)

Secured AWS SAAS by leveraging OWASP vulnerability scanning tools. (#CloudSecurity, #VulnerabilityManagement)

## **AI Research Scientist**

tawyn.com

Sep 2018 - Oct 2021 (3 years 2 months)

Key Highlights:

Full-stack AI & ML Consultant: Leveraged leading AI & ML technologies (e.g., Python Pandas, Node.JS, AI Expert) in mixed cloud environments to build and deploy innovative solutions for various clients.

Developed cutting-edge AI projects (under NDA):

VR/AR self-driving vehicle simulator: Code integrated into production vehicles.

AI financial bot application: Streamlined financial processes.

Blockchain platform for crypto & stocks: Enhanced secure asset trading.

AI scientific research app: Advanced research capabilities.

Automated infrastructure & deployments: Utilized Terraform, Ansible, Chef, Puppet to build fast, reliable, and secure SaaS infrastructures.

Blockchain & Cryptocurrency Expertise:

Built and deployed decentralized applications (dApps) on blockchain platforms.

Mined Bitcoin and various cryptocurrencies.

Designed ASIC blueprint for SHA256 mining.

Collaborated with Bitmain and hosted Ethereum blockchain nodes.

Streamlined CI/CD Pipelines: Implemented Terraform for CRUD operations, pushed testing environments to CI/CD pipelines, and managed SaaS product upgrades.

## **AI Expert**

tawyn.com

Mar 2015 - Oct 2021 (6 years 8 months)

Thats ,All,What,You,Need is Laboratory and fond which is architect and designs products for daily use , also creates water and energy delivery products for disasters zones created by nature or war .



## **Firmware Test/Infrastructure Developer**

LSI, an Avago Technologies Company

Feb 2014 - Aug 2014 (7 months)

Key Contributions:

Automated Regression Testing: Developed robust scripts to automate firmware testing, streamlining the process and ensuring quality.

Build Automation Expertise: Provided support for firmware and build automation tools (AccuRev, Jira, Code Collaborator, Jenkins), optimizing development workflows.

IT Administration: Effectively managed servers, applications, and mailing lists, ensuring smooth

operations for engineering teams.

#### Technical Skills:

System Administration: Proficient in Windows and Linux (RedHat) administration.

Scripting: Strong skills in Python, Bash, Perl, and Windows PowerShell.

Programming: Foundation in C/C++ development.

Storage Technology: Knowledge of SATA, AHCI, PCIe, Flash, and SSD interfaces.

#### Additional Highlights:

Experience with CI/CD Tools: Practical experience with Jenkins, a widely used CI/CD platform.

Problem-Solving and Adaptability: Demonstrated ability to learn and adapt quickly to new technologies and tools.

## Senior Software Engineer

### Mосу Systems

Jan 2013 - Dec 2013 (1 year)

#### Key Achievements:

Mastered VMware virtualization: Designed, installed, configured, and maintained VMware ESXi infrastructure, including VSphere4, ESXi 5.x servers, virtual networking (switches, VM kernel ports), and virtual storage (access control, VMFS data stores).

Integrated offshore development: Successfully integrated a client portal built on Ruby on Rails and Postgres with SaaS testing environments.

Pioneered ARM technology: Led the creation, management, and configuration of ARM-based technologies.



## Cloud/Web Engineer

### NETWORK-SECURITY-SOLUTIONS

Sep 2012 - Jan 2013 (5 months)

#### Key Achievements:

Deployed cloud-based web applications: Built multi-tier ASP.NET applications and deployed them on Amazon EC2, ensuring high quality with 90% unit test coverage using RSpec.

Developed with Python and Django: Created web applications and architectures using Python, Django, templates, tags, filters, Solango, Haystack, JavaScript, jQuery, and HTML.

Integrated mobile and web technologies: Integrated Ubuntu Touch OS into mobile devices and conducted Android mobile API testing.

Championed automation and testing: Set up Hudson CI server for automated builds and implemented Cucumber BDD framework for integration test coverage.

Demonstrated versatility: Worked effectively with both front-end and back-end technologies, and has experience with Haskell, Scala, Lisp, and NoSQL databases.

Embraced functional programming: Applied XP and functional programming principles for efficient and scalable solutions.



## Consultant

### Cisco

Aug 2011 - Sep 2012 (1 year 2 months)

#### Key Achievements:

Network Performance Testing:

Conducted comprehensive video quality tests using iPerf for bandwidth control.

Analyzed network traffic using Wireshark to troubleshoot and optimize performance.

Configured Cisco routers for bandwidth management and data capture.

New Technology Testing and Implementation:

Supported the development and testing of confidential, next-generation B2C and C2C technologies.

Feature Enhancement Testing:

Collaborated with development teams to test and enhance features based on pilot system feedback and defect tracking.

Field Issue Resolution:

Conducted in-depth research and re-verification of critical issues related to TelePresence, VoIP, and cloud implementations.

Demo Setup:

Assisted in setting up B2C demos for prospects and senior management.

Virtualization Infrastructure:

Installed VMware ESXi infrastructure to virtualize demo environments for internal testing and release.

Automated Testing Platform Development:

Designed and developed an automated testing platform for VoIP and cloud-based healthcare applications using Java, SIP, SOAP, CUCM, CUPS, and Jabber.

Performance Testing Leadership:

Led the integration, architecture, and coordination of performance testing activities for the HSX Healthcare solution.

Virtualized Environment Management:

Managed the design, setup, and commissioning of a virtualized environment using VMware VSphere and ESXi for HSX performance testing.

Solution Deployment:

Successfully deployed the HSX solution at customer sites.



## **IT/QA Consultant,**

**Contra Costa College**

Sep 2010 - Feb 2011 (6 months)

Tested Company API built using XCODE

- Used Selenium to test web sites and their systematic updates for functionality, usability, regression, performance, browser and operating systems compatibility
- Wrote Perl scripts to parse large log files
- Verified the functionality of stored procedures by inspection of the Oracle db
- Developed and maintained release acceptance tests using Selenium IDE, JUnit, and Eclipse
- White box testing of Perl CGI scripts for database access
- Located software defects and made them reproducible. Submitted bug reports using Mantis bug tracking system. Verified bugs fixed in new releases.
- Developed application using components of iPhone SDK 3.x/4.x, HTML5, CSS3 and Adobe ,jQuery.
- Wrote C Shell scripts to automate testing
- Utilize Jira Agile Project management software

## **QA specialist ,consultant ,WIFI network engineer**

**2005-2011 Wireless technology**

Jan 2005 - Feb 2011 (6 years 2 months)

Provided custom design, Managed projects ,did troubleshooting for some successful media companies and educational institutions .

Maintained and enhanced mobile network, involving design, implementation, and migrations.

Architecture included quality of service configurations, CISCO router/switch configuration, capacity planning, and modernization of supporting systems.  
Installed and performed QA of wired and wireless tasks over networks to maximize operations.  
Consulted clients on the issues based on Bugs' reports.  
Lead team of volunteers and paid testers. Coordinated projects, testing process and assisted in writing documentation.  
Work with customers to troubleshoot issues in the field. Implemented test plans.  
Built CISCO VoIP systems ,installed PBX and WIFI network.  
Implemented strong time management policy.

## **Mobile/VoIP QA Tester**

### **JSCenter**

Mar 2010 - Dec 2010 (10 months)

Tested implementation of mobile infrastructure and services configuration, which involved CISCO router/switch configuration, capacity planning, and modernization of supporting systems, integrating L3 switches to support Quality of Service, CISCO VoIP, PBX and WIFI network

- Estimated Voice and Video traffic on the core switch for the entire LAN
- Worked closely with VLANs (to provide the segmentation services); multiple Layer 3 (L3) networks on the same Layer2 (L2) switch;
- Installed and performed QA of wired and wireless tasks over networks
- Develop ASP.NET in C#, VB.NET and Microsoft Word/Excel templates
- Used tools like JMeter, the Grinder and TestMaker
- Extensive development of flash based animation, effects and transition for market based web sites and online surveys.
- Worked with Adobe Photoshop and fireworks to create graphics for different site.
- Used Flex HTTPService, to consume and parse the XML files and represent that in the form of charts and other menu and tree list. The app provides filtration of the data on the basis of the release build and the machine.

## **QA/IT Specialist**

### **RadioShack**

Oct 2005 - Aug 2009 (3 years 11 months)

Provided custom design, white and black box testing, troubleshooting for company clients (media companies and educational institutions)

- Supported Credit Risk system by writing Perl scripts and Autosys jobs to process large feeds and query databases from business divisions and update databases with current positions and market data to allow downstream systems to determine credit risk
- Tested corporate web site for functionality, browser and OS compatibility at all the stages of development. Reported numerous bugs of all the severity levels
- Implemented Selenium IDE/RC for automating regression testing of new builds

## **Software Quality Analyst**

### **ASAP Tickets**

Sep 2003 - Sep 2005 (2 years 1 month)

Tested web sites and their systematic updates for functionality, usability, regression, performance, browser and operating systems compatibility

- Developed detailed test procedures for user acceptance testing based on JUnit

- Validated data flow between in-house Point-of-sale software and APPOLO/GALILEO and WorldSpan travel networks
- Developed and maintained automated release acceptance tests using Selenium IDE, Java, and Eclipse
- Submitted bug reports using Mantis bug tracking system. Verified bugs fixed in new releases.

## **2003 IT Specialist**

### **Lufthansa Cargo Management**

Jul 2002 - Oct 2003 (1 year 4 months)

Enhanced Perl scripts to use centralized XML configuration files.

- Tracked down problems with Perl scripts related to data file, data feed, and programming errors.
- Implemented hardware/software solutions on a timely basis to maintain compliance to airline security policies & government regulations regarding information security
- Supported worldwide system and network infrastructure consisting of 20 Windows servers and 6 UNIX servers interconnected with mainframe through Cisco routers. Investigated and resolved performance issues demonstrating strong diagnostic skills across multiple platforms.
- Supported & maintained different types of servers @ six nationwide locations with different types of operating systems: UNIX, Windows server & MS SQL Server

## **Intranet Software Developer Daewoo Tashkent**

### **Daewoo**

Jan 2000 - Jan 2002 (2 years 1 month)

Created closed Intranet structure based on Unix ,powered by Python created browser .

Build SQL data base using Oracle servers.

Performed software developer and QA duties on site.

Created lib. for Ruby and other open-source software .

Used Ruby as an interpreted language on a server machine like a Web server where it is used as an interpreted language to run CGI or create Web forms and cookies.

Embedded Ruby into HTML documents.

## **Software Developer**

### **Siemens Lab**

Jan 1996 - Jan 2000 (4 years 1 month)

TSTU and Siemens JV computer Lab.Tashkent.

Developed large-scale distributed applications with a variety of programming languages and platforms, including C/C++,Python, Ruby, J2EE, and .NET.

Published Articles In Local Software Journals And Has Written Several Other Popular articles about Python is a high-level, interpreted language.

Develop of a wide range of applications, from simple text processing to WWW browsers to Educational games.

Structured a method of programming designed to help make large programs easier to read.

Created new methodology over Object-Oriented Programming

## **Education**



### **Western Governors University**

Master's degree, Cybersecurity and Information Assurance

Aug 2020 - Jan 2021

WGU's online Master of Science Cybersecurity and Information Assurance degree program is closely aligned with the National Initiative for Cybersecurity Education (NICE) and was designed with input from cybersecurity experts and leading IT employers to meet the most recent U.S. Department of Homeland Security (DHS), and National Security Agency (NSA) guidelines.

## **TSTU**

MBA, Economy

2000 - 2002

Help to create peace and prosperity among less financially fortunate students.

## **TSTU**

BS, computer science

1996 - 2000

Study ,research related to my diploma project documents ,prepare my self for PhD .

## **Licenses & Certifications**

**Android Forensic** - Android Forensic



**Google IT Support Professional Certificate Specialization** - Coursera Course  
Certificates  
7Z7AVY6LZARN



**IT Automation: It's not that scary!** - Coursera Course Certificates  
7BYNDF8QZB33



**IT Security: Defense against the digital dark arts** - Coursera Course Certificates  
PFTPQQHFZS8U



**Operating Systems and You: Becoming a Power User** - Coursera Course  
Certificates  
WR2CVJUCZJBG



**System Administration and IT Infrastructure Services** - Coursera Course  
Certificates  
CBEYSN9SL2TK



**The Bits and Bytes of Computer Networking** - Coursera Course Certificates  
357H8773ALFH



**Technical Support Fundamentals** - Coursera Course Certificates



VFZY8VHDDFVA



**Game Design and Principles of Game Design Development** - Coursera Course  
Certificates

**IBM Data Science Professional Certificate**



**IBM AI Engineering Specialization** - Coursera  
NUVR8NDLYH6B



**IBM Data Science Specialization** - Coursera  
UM26FXL4ELZP



**Crash Course on Python** - Coursera  
MSBN2XPB6S8M



**Using Python to Interact with the Operating System** - Coursera  
44M7KEU8RS3M



**Configuration Management and the Cloud** - Coursera  
NVCDRU249YYZ



**Google IT Automation with Python** - Coursera



**AWS Cloud Architect Nano degree Program** - Udacity



**EC-Council Certified Ethical Hacker (C|EH)** - EC-Council  
Issued Feb 2021 - Expires Feb 2024



**Google Project Management** - Google



**IBM DevOps and Software Engineering** - IBM



**Google Cybersecurity** - Google



**Scalable Machine Learning with Apache Spark** - Coursera



**IBM AI Engineering Professional Certificate** - Coursera



## **IBM AI Engineering Professional Certificate - Coursera**

### **Skills**

Docker Swarm • Kubernetes • Azure DevOps Services • Terraform • Software Development • Infrastructure • Git • Behavior-Driven Development (BDD) • DevOps • Docker Products

### **Honors & Awards**

#### **Android Forensics Investigation - Concise Courses**

Aug 2015

This certification is awarded to

Bek Nurmatov

For successfully completing the course:

Android Forensics Investigation

#### **Neuro Linguistic Programming - Auspiciu**

Jun 2015

Hereby Certificates that

Ulug Beck Nurmatov

In witness thereof the following have affixed their signature hereto this 12th day of June 2015

Has successfully completed a Practitioner level Home Study training in the art & science of Neuro Linguistic Programming and is hereby awarded this

#### **Badges - Coursera**

Mar 2024