# IOAN-MIHAIL STAN

## COMPUTER SKILLS

- Kubernetes & OKD, Shell Scripting, System Administration – Linux/Unix Administration - *advanced*
- Containerization runtimes (Docker, LXC, Podman, CRI-O, Kata, runsc), Infrastructure Services (LDAP, NFS, Web server, DNS), Configuration Management Tools (Puppet, Ansible & AWX), Programming (Python), Monitoring & Telemetry (ELK, Influx & Telegraf, Loki & Promtail), Cloud (AWS, GCP) - *medium*
- Java, Cisco IOS, SeLinux, Openstack & Openstack API/SDK – *basic*

## EXPERIENCE

**15.11.2021 – present**

DevOps Engineer, *Bitdefender, Hydra DevOps GravityZone project*

- Responsibilities: Part of the Hydra project, I am in charge to maintain the GravityZone infrastructure, cloud and on prem, and most development support tool, to translate different recurring tasks into automated pipeline aligned to industry guidelines and security practices, to develop or improve the existing tools for team members and extensions.
- Technologies: AWS, GCP, Kubernetes, Puppet, Ansible, Python, Perl, ELK, Message Brokers, Monitoring & Telemetry tools

**03-08-2020 – 14.11.2021**

Site Reliability Engineer and DevOps Engineer, *IBM, IBM Essentials Project*

- Responsibilities: part of a product development project, I maintain the underlying Kubernetes (IBM Cloud Private) infrastructure and the on-prem cloud infrastructure and I support the full development lifecycle, from the operational point of view. Furthermore, I am involved in technical decisions, and I also conduct research activities providing MVPs that will be further integrated into the main solution.
- Technologies: Kubernetes (IBM Cloud Private), Helm Charts, DevOps Tools, Linux Enterprise Servers (Ubuntu Server)

**05.08.2019 – 02.08.2020**

ATLAS Distributed Computing Central Services Operations Support, *CERN, ATLAS Experiment*

- Responsibilities: ADC project is responsible for processing offline data produced by the ATLAS experiment at the Large Hadron Colider at CERN. As member of the CSOPS team, I was responsible to configure, maintain and monitor the applications and underlying systems used by ATLAS software teams and software managers to produce physics results, ensuring also that ATLAS software services are following modern security standards and good computing practices. Another side responsibility was to migrate existing physics software to Docker and OKD and to support migration to a cloud native approach.
- Technologies: Puppet, OKD (former Openshift Origin), Docker, Openstack & OpenStack API, Python, Shell Scripting, Databases, Grafana Monitoring, SeLinux

| 01.08.2018 – 04.08.2019 | **Site Reliability Engineer and DevOps Engineer**, *IBM, Boomerang (Automation Platform) Project* |
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· Responsibilities: part of a product development project, I had maintained and monitored the underlying Kubernetes (IBM Cloud Private) infrastructure and supported the full development lifecycle, from an operational point of view. Furthermore, I was also involved in the solutioning, actively participating in technical decisions meetings and Design Thinking sessions.

· Technologies: Kubernetes (IBM Cloud Private), Helm Charts, DevOps Tools, Linux Enterprise Servers (Ubuntu Server)

| 01.11.2013 – 01.08.2018 | **System Administrator and Infrastructure Specialist**, *IBM, AppOps (former Development Support Team)* |
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· Responsibilities: monitor and troubleshoot system problems on client servers, manage infrastructure servers such as NFS servers or LDAP servers, develop shell scripts for automation, work with emerging and proprietary technologies like Watson Explorer, IBM Cloud Public (former Bluemix), IBM Security Directory Servers, IBM Urban Code Deploy, develop and present solutions and Proof-of-Concepts to customers, to support their adoption of a DevOps culture and also in line with the DevOps methodologies.

· Technologies: Linux Enterprise Servers (RHEL, SLES), Windows Servers, Power/AIX servers, Shell Scripting, LDAP technologies, Watson Explorer, DevOps Tools

| 01.07.2015 – present | **Teaching Assistant**, *University "Politehnica" of Bucharest, Faculty of Automatic Control and Computer Science, department of Computer Science and Information Technology* |
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· Responsibilities: part of the Local Networks Course Team, involved in teaching 3$^{rd}$ year students the basics of computer networks, exploring technologies like Cisco IOS, Linux Systems and Linux Containers.

· Technologies: Cisco IOS, Linux Systems, LXC, Cloud, Virtual Switches, iptables, Docker

| 01.02.2018 – 01.05.2018 | **Liquidity.world Startup** |
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· Responsibilities: one of the members of the Liquidity Flow Project, I am coordinating the Protocol Development Team involved in finding heuristics for the Blockchain Consensus Mechanism. Furthermore, I am the developer and the maintainer of the Concept Architecture and also, I am consultant and hub for all the technical decisions.

· Project description: A Cryptocurrency serving as infrastructure for financial services

| 01.10.2015 – 01.08.2016 | **M4Security Startup** |
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· Responsibilities: one of the members of the M4Security Project, leading a team of 4 people, doing administrative and technical activities within the team

· Project description: Bluetooth headset that aims to encrypt the voice traffic, end-to-end, inside the device

· Awards: Best Cyber Security Product at Innovation Labs 2016 - a startup accelerator from Romania

· Technologies: Bluetooth Controller programming, Networking Programming in C, Android, Raspberry PI, Linux

| 19.07.2014 – 14.05.2017 | **Cisco CCNA Instructor**, *Cisco Academy UPB* |
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· Responsibilities: Cisco certified trainer, involved in teaching the basics of networking in line with the Cisco curriculum, holding hands-on sessions on switches and routers, and shadowing new junior instructors.

· Technologies: Cisco IOS, Network Stacks

| 26.08.2013 –<br>31.10.2013 | Intern – System Administrator, *IBM, Development Support Team* |
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| | · Responsibilities: track and troubleshoot minor system problems on client servers, develop shell scripts for monitoring tasks (ex. CPU load, SSH service status) |
| | · Technologies: Linux Enterprise Servers (RHEL, SLES), Windows Servers, Power/AIX servers, Shell Scripting |
| 15.10.2012 –<br>18.07.2014 | Cisco CCNA Junior Instructor, *Cisco Academy UPB* |
| | · Responsibilities: Junior trainer, involved in teaching basic concepts of networking in line with the Cisco curriculum, holding hands-on sessions on switches and routers and maintaining the lab infrastructure. |
| | · Technologies: Cisco IOS, Network Stacks |

## EDUCATION

| October 2017 -<br>present | University "Politehnica" of Bucharest, Faculty of Automatic Control and Computer Science, department of Computer Science and Information Technology |
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| | · PhD Candidate |
| | · Thesis: Privacy in Critical Infrastructure |
| | · Articles: |

- · Instant payment and latent transactions on the Ethereum Blockchain (co-author)
- · Enforce a Global Security Policy for User Access to Clustered Container Systems via User Namespace Sharing
- · Exploring the self-service model to visualize the results of the ATLAS Machine Learning analysis jobs in BigPanDA with Openshift OKD3

| October 2015 -<br>June 2017 | University "Politehnica" of Bucharest, Faculty of Automatic Control and Computer Science, department of Computer Science and Information Technology |
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| | · M.Sc. in Computer Science and Information Technology, 2 years degree |
| | · Study Program: Security of complex computer networks |
| | · Graduation date: 28 June 2017 |
| | · 2 years grade: 9.58 \| Final grade: 10.00 |
| | · Master Project: A modern voting system for validating content in trivia games – the project comprises the architectural view and the implementation of a voting system useful for content creators when they need to validate their assets within the community they belong to. |
| | Contribution: Concept architectures, Frontend, Backend, Infrastructure.<br>Technologies: Java, Android, Tomcat, OpenLDAP, Mathematical statistics |

| October 2011 -<br>July 2015 | University "Politehnica" of Bucharest, Faculty of Automatic Control and Computer Science, department of Computer Science and Information Technology |
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· B.Sc. in Computer Science and Information Technology, graduated in a 4-year degree

· Graduation date: 9 July 2015

· 4 years grade: 9.01 | Final grade: 10.00

· Diploma Project: vPersonna – a proof of concept demonstrating the flexibility of moving the networking flow decisions in software, in relation with a dynamic or static user profile, following the Network Function Virtualization paradigm.

Contribution: Front End and modules integration.
Technologies: Python, Django, PostgreSQL

## CERTIFICATIONS

| 29.10.2021-<br>present | Certified Kubernetes Security Specialist (CKS), Linux Foundation Certification |
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| 17.04.2020 -<br>present | Certified Kubernetes Administrator (CKA), Linux Foundation Certification |
| 21.03.2018 -<br>present | Certified Disciplined Agilist |
| 19.07.2014 -<br>present | Cisco CCNA Fast Track – Instructors Exam<br><br>Eligibility to teach CCNA courses |
| 28.11.2017 -<br>present | RPA Developer Foundation Diploma (UIPath – Robotics Process Automation) |
| 28.11.2016 -<br>present | IBM Cloud Platform Application Development V1 |
| 24.09.2013 -<br>24.09.2016 | Cisco Certified Network Associate Routing & Switching |

## VOLUNTEER WORK

| 01.02.2017 –<br>14.05.2017 | AcadNet – Networking Content Team Supervisor, *Cisco Academy UPB* |
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· Responsibilities: member and Networking Team supervisor, I had proposed the topics and technical subjects for the networking Olympiad exam, and I had also coordinated the content team during the AcadNet contest.

AcadNet is a National Olympiad in Informatics for Romanian High School students covering topics like Networking, Engineering Skills, and Software Interoperability.

| 01.08.2012 -<br>12.01.2016 | World of USO – Content Team Member, *ROSEdu* |
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· Responsibilities: member and later World of USO Content team leader.

World of USO is a browser game that offers first year students a complex and challenging game of trivia on topics such as Computer Science and Computer Science, Computer History and Geeks Facts.

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| 02.03.2013 - 11.05.2013 | **CDL (The Free Open Source Community and Development Lab) Mentor,** *ROSEdu* |

· Responsibilities: Moodle CDL Project mentor, guiding students in contributing to Moodle open-source project with new modules and add-ons.

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| 31.07.2012 - 30.09.2012 | **Developer on Moodle Fire v3.1 Project,** *Cisco Academy UPB* |

· Responsibilities: I developed a Financial Management Module in PHP and Java Script and a Forum Global Management plug-in for the Moodle platform.

## LANGUAGES

· Romanian – native speaker

· English – advanced | French – beginner