

## Experience

### Revolut Ltd.

Cracow, Poland

PYTHON SOFTWARE ENGINEER

2022 Apr. - current

- Develop and maintain cloud infrastructure using Terraform.
- Build and maintain: backend for web application responsible for discovering malicious trades, ETL framework for transaction reporting.
- Design and build reconciliation service with FastApi

#### TECH STACK

- Python 3.11, FastApi, Docker, Linux, OpenSSL, HashiCorp Vault, Celery, SQLAlchemy, Apache Airflow, PostgreSQL, Exasol, git, GCP

### Capgemini

Cracow, Poland

PYTHON CLOUD DEVELOPER

2021 Jun. - 2022 Apr.

- Lead dev of the cloud-native project, with active role in architecture design.
- Built and deployed overall service infrastructure utilizing Docker container, and AWS stack, focusing on authorization, and auto-scaling.
- Developed an easy-to-use web application, allowing users to connect via RDP or SSH with machines outside Capgemini network.

#### TECH STACK

- Python 3.10, Docker, Linux, OpenSSL, HashiCorp Vault, Apache Guacamole, git, BitBucket
- AWS: CCloudFormation, VPC, EC2, ECS, ECR, Route53, ELBv2, RDS, DynamoDB, CodePipeline, S3

### Autodesk, Inc.

Cracow, Poland

TEST ENGINEER

2020 Jun. - 2021 Jun.

- Developed and maintained regression test framework with REST API.
- Developed software for 3D object comparison in Python.
- Orchestrated automatic test launcher with Jenkins pipeline, hosting the test results on s3 bucket as HTML pages.
- Pushed initiative to refactor old codebase and reduce tech debt to minimum, and as a result tests duration was reduced greatly.

#### TECH STACK

- In-house cloud computing platform, AWS S3, Python 3.7, C++17, Docker, Linux, OpenSSL, Allure, Behave, OpenCV, Jenkins, git

### Woodward, Inc.

Niepołomice, Poland

TEST ENGINEER

2019 Sep. - 2020 Jun.

- Developed Flask web application from scratch, with Bootstrap frontend and custom login solution based on LDAP and AD
- Developed programs in NI TestStand and Labview.
- Gathered data from physical test stands into PostgreSQL instance and processed it for display.
- Supported technicians with measurement hardware (oscilloscopes etc.)

#### PRODUCT MATERIAL COMPLIANCE INTERN

2018 Jul. - 2019 Sep.

- Validated electronic components against environmental directives (RoHS, REACH, Conflict Minerals).
- Automated the validation process with VBA and Python scripts

### PCO S.A.

Warsaw, Poland

TRAINEE

2017 Aug. - 2017 Sep.

- Designed mechanical subassembly and development of technological process for mechanical parts included in the developed subassembly
- Development of program for CNC machines for the selected operation for developed subassembly, and selection of special equipment to produce part
- Received comprehensive introduction to noctovision, thermovision, and other optical technologies

## Education

### AGH University of Science and Technology

Kraków, Poland

B.ENG. IN MATERIAL SCIENCE AND ENGINEERING

2013 - 2018

- Participated in various laboratory courses, including those focused on spectrometry and other measurement techniques. These courses provided students with valuable exposure to real-world applications and a comprehensive understanding of experimental methodologies.
- Thesis on Methods and criteria for validation of the voltammetric procedure for determination of lead in animal wax.
- Used  $\LaTeX$  whenever possible

## Skills

<b>DevOps &amp; Cloud</b>	AWS, GCP, Docker, Kubernetes, Terraform, Jenkins
<b>Back-end</b>	Flask, FastApi, gunicorn, REST API, celery, numpy, panda
<b>Databases</b>	PostgreSQL, Exasol, SQLAlchemy, pyODBC, sqlite, redis, OracleDB
<b>Programming Languages</b>	Python, C++, C, $\LaTeX$
	Polish, English

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**Extracurricular Activity****B10S (B1t On the Security, Underground hacker team)**

S.Korea

CORE MEMBER

Nov. 2011 - PRESENT

- Gained expertise in penetration testing areas, especially targeted on web application and software.
- Participated on a lot of hacking competition and won a good award.
- Held several hacking competitions non-profit, just for fun.

**WiseGuys (Hacking & Security research group)**

S.Korea

MEMBER

Jun. 2012 - PRESENT

- Gained expertise in hardware hacking areas from penetration testing on several devices including wireless router, smartphone, CCTV and set-top box.
- Trained wannabe hacker about hacking technique from basic to advanced and ethics for white hackers by hosting annual Hacking Camp.

**PoApper (Developers' Network of POSTECH)**

Pohang, S.Korea

CORE MEMBER &amp; PRESIDENT AT 2013

Jun. 2010 - Jun. 2017

- Reformed the society focusing on software engineering and building network on and off campus.
- Proposed various marketing and network activities to raise awareness.

## PLUS (Laboratory for UNIX Security in POSTECH)

Pohang, S.Korea

### MEMBER

Sep. 2010 - Oct. 2011

- Gained expertise in hacking & security areas, especially about internal of operating system based on UNIX and several exploit techniques.
- Participated on several hacking competition and won a good award.
- Conducted periodic security checks on overall IT system as a member of POSTECH CERT.
- Conducted penetration testing commissioned by national agency and corporation.

## MSSA (Management Strategy Club of POSTECH)

Pohang, S.Korea

### MEMBER

Sep. 2013 - Jun. 2017

- Gained knowledge about several business field like Management, Strategy, Financial and marketing from group study.
- Gained expertise in business strategy areas and insight for various industry from weekly industry analysis session.

## Honors & Awards

### INTERNATIONAL AWARDS

2021	<b>2nd Place</b> , AWS ASEAN AI/ML GameDay	Online
2020	<b>Finalist</b> , DEFCON 28th CTF Hacking Competition World Final	Las Vegas, U.S.A
2018	<b>Finalist</b> , DEFCON 26th CTF Hacking Competition World Final	Las Vegas, U.S.A
2017	<b>Finalist</b> , DEFCON 25th CTF Hacking Competition World Final	Las Vegas, U.S.A
2014	<b>Finalist</b> , DEFCON 22nd CTF Hacking Competition World Final	Las Vegas, U.S.A
2013	<b>Finalist</b> , DEFCON 21st CTF Hacking Competition World Final	Las Vegas, U.S.A
2011	<b>Finalist</b> , DEFCON 19th CTF Hacking Competition World Final	Las Vegas, U.S.A
2012	<b>6th Place</b> , SECUINSIDE Hacking Competition World Final	Seoul, S.Korea

### DOMESTIC AWARDS

2021	<b>2nd Place</b> , AWS Korea GameDay	Seoul, S.Korea
2015	<b>3rd Place</b> , WITHCON Hacking Competition Final	Seoul, S.Korea
2017	<b>Silver Prize</b> , KISA HDCON Hacking Competition Final	Seoul, S.Korea
2013	<b>Silver Prize</b> , KISA HDCON Hacking Competition Final	Seoul, S.Korea
2013	<b>2nd Award</b> , HUST Hacking Festival	S.Korea
2010	<b>3rd Award</b> , HUST Hacking Festival	S.Korea
2012	<b>3rd Award</b> , Holyshield 3rd Hacking Festival	S.Korea
2011	<b>2nd Award</b> , Holyshield 3rd Hacking Festival	S.Korea
2011	<b>5th Place</b> , PADOCON Hacking Competition Final	Seoul, S.Korea

### COMMUNITY

2022	<b>AWS Community Builder (Container)</b> , Amazon Web Services (AWS)
2022	<b>HashiCorp Ambassador</b> , HashiCorp

## Certificates

2023	<b>AWS Certified Advanced Networking - Specialty</b> , Amazon Web Services (AWS)
2023	<b>AWS Certified Developer - Associate</b> , Amazon Web Services (AWS)
2023	<b>AWS Certified Cloud Practitioner</b> , Amazon Web Services (AWS)
2022	<b>AWS Certified Security - Specialty</b> , Amazon Web Services (AWS)
2022	<b>AWS Certified Solutions Architect - Professional</b> , Amazon Web Services (AWS)
2019	<b>AWS Certified Solutions Architect - Associate</b> , Amazon Web Services (AWS)
2021	<b>AWS Certified SysOps Administrator - Associate</b> , Amazon Web Services (AWS)
2020	<b>Certified Kubernetes Application Developer (CKAD)</b> , The Linux Foundation
2023	<b>HashiCorp Certified: Consul Associate (002)</b> , HashiCorp
2023	<b>HashiCorp Certified: Terraform Associate (003)</b> , HashiCorp
2020	<b>HashiCorp Certified: Terraform Associate (002)</b> , HashiCorp

## Presentation

### DevFest Seoul by Google Developer Group Korea

Seoul, S.Korea

PRESENTER FOR <HOSTING WEB APPLICATION FOR FREE UTILIZING GITHUB, NETLIFY AND CLOUDFLARE>

Nov. 2017

- Introduced the history of web technology and the JAM stack which is for the modern web application development.
- Introduced how to freely host the web application with high performance utilizing global CDN services.

### 6th CodeEngn (Reverse Engineering Conference)

Seoul, S.Korea

PRESENTER FOR <DEFCON 20TH : THE WAY TO GO TO LAS VEGAS>

Jul. 2012

- Introduced CTF(Capture the Flag) hacking competition and advanced techniques and strategy for CTF

6th Hacking Camp - S.Korea

PRESENTER FOR <METASPLOIT 101>

S.Korea

Sep. 2012

- Introduced basic procedure for penetration testing and how to use Metasploit

Writing

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A Guide for Developers in Start-up

Facebook Page

FOUNDER & WRITER

Jan. 2015 - PRESENT

- Drafted daily news for developers in Korea about IT technologies, issues about start-up.

AhnLab

S.Korea

UNDERGRADUATE STUDENT REPORTER

Oct. 2012 - Jul. 2013

- Drafted reports about IT trends and Security issues on AhnLab Company magazine.

Program Committees

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- 2016 **Problem Writer**, 2016 CODEGATE Hacking Competition World Final
- 2013 **Organizer & Co-director**, 1st POSTECH Hackathon
- 2012 **Staff**, 7th Hacking Camp
- 2012 **Problem Writer**, 1st Hoseo University Teenager Hacking Competition
- 2012 **Staff & Problem Writer**, JFF(Just for Fun) Hacking Competition

S.Korea

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