

# Michał Tuśnio

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I am a multi-skilled DevOps engineer with **5+ years of permanent & contract experience**, currently looking for new challenges abroad. My skill set includes a mix of infrastructure, automated testing, full-stack development, embedded engineering, and hobbyist game development. Always happy to be in a position in which I can share knowledge. Especially passionate about Linux, Docker and (good) DevOps.

## Key skills

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- Proficient in **Python, JavaScript/NodeJS, Bash, C, C++14, Go**.
- **AWS** (Certified Solutions Architect Associate) & **Google Cloud**.
- Infrastructure as code, configuration management – **Terraform, Ansible, Serverless**
- Continuous integration and deployment – **Jenkins, CircleCI, Travis, Concourse**.
- Containerisation and orchestration technologies – **Docker, Kubernetes, AWS ECS**.
- **Linux** expertise. **Nginx/Apache** configuration.
- SQL and NoSQL databases – **MySQL, MongoDB, DynamoDB**.
- Monitoring systems – **Nagios, Cloudwatch, Datadog, Grafana**.
- Secrets management tools – **HashiCorp Vault**.
- Knowledge of the **networking** stack.
- Building **highly available, scalable and fault tolerant** systems, as well as **serverless** architectures.
- **Webapps** and **RESTful APIs** development & deployment.

## Languages

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**Polish** Mothertongue  
**Mandarin** Lower Intermediate

**English** Fluent (Cambridge CPE, C2)

## Experience

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**Toptal Engagement** Remote  
**DevOps Lead (Contract assignment)** Sept. 2020 – Dec. 2020

- Led a greenfield AWS infrastructure setup for an undisclosed entertainment platform.
- Created a multi-account AWS setup to limit blast radius, as well as all onboarding and offboarding of users via Terraform.
- Built a custom Terraform Serverless stack interfacing API Gateway with

NextJS lambdas and a backend PostgreSQL database.

- Set up CodePipeline and CodeBuild CI/CD that followed Gitflow Workflow.
- Supported the dev team by holding regular DevOps check ins allowing the dev team to raise issues, criticise infrastructure decisions and help prioritise infrastructure tasks.

### **Vivacity Labs**

London

#### **Software Engineer (Contract assignment)**

Feb 2020 - June 2020

- Parallelised a sequential, multi-architecture, multi-node Jenkins pipeline. Additionally, nodes had to be synchronized, since some acted as producers for consumers running tests, and were communicating with each other using a queue to notify each other of readiness & fulfillment of tests.
- Delivered Ansible scripts that configured a box acting as an Nginx proxy for Go backend applications, and was set up to map a connection based on its URL to the appropriate backend service.
- Supported the team's permanent DevOps engineer in managing Jenkins slaves & masters, as well as writing automatic jobs for detecting and remediating common issues - eg. slaves running out of disk space.
- Wrote Go code for parts of a message processing pipeline, mainly focused around using existing message information to add extra data - counting the amount of vehicles in a zone, calculating their speed over time and similar.

### **River Island**

London

#### **Site Reliability Engineer (Contract assignment)**

July 2019 - Jan. 2020

- Prepared for a transition from Concourse to Jenkins by providing a cost-efficient setup that ensured automatic recovery on failure, backups, and fully source-controlled versioning of plugins and Jenkins itself.
- Helped RI's web store team create container definitions for ECS and scaling policies that proved to offer no downtime during sale events and traffic spikes.
- Delivered a load-testing setup using Gatling, Lambda, and spot instances—allowing River Island's web store team to write their own Scala load tests and run a Gatling cluster to profile their applications.
- Supported RI's transition towards a company-wide standardized Terraform setup by building an MVP solution that generated infrastructure based on teams specifying services they require in YAML. This would allow one infrastructure team to maintain the Terraform code itself and enforce specific solutions to be shared between teams.

**EveryCity**  
**AWS Solutions Engineer**

London  
August 2018 – May 2019

- Designed best architecture for new clients and on-boarded them onto AWS – set up their infrastructure, zero-downtime deployments, integrated their systems into EC's monitoring.
- Set up Terraform scripts and Docker containers for an ECS setup to migrate client's infrastructure from a traditional VM deployment to container based one.
- Worked alongside client's engineering team to deliver CI & CD for a serverless GraphQL and RESTful stack on AWS.
- Built company's offering of security products as well as CloudFormation and Terraform templates for web hosting products.
- Performed in-depth investigations to find the root cause for applications' performance issues or downtime.

**Vivacity Labs**  
**Software Engineer**

London  
June 2017 – August 2018

- Built applications & frameworks utilising pub-sub to send, receive and store messages from hundreds of sensors deployed around Milton Keynes and Cambridge.
- Delivered solutions to simplify debugging of problems with devices in the field. Accomplished by building tooling and mocks that allow for recording & replaying of messages to simulate real-world behaviour.
- Helped maintain a Kubernetes cluster for scheduling video analysis jobs whenever a client uploaded a new set of videos.
- Built a Jenkins framework to be used for all internal C++ projects for CI/CD, and set up Jenkins pipelines for them.
- Built RESTful NodeJS APIs & React webapps.
- Filled in as a technical lead during the team's lead absence.
- Wrote applications that utilized ML models to perform vehicle detection and send information about them in real-time.

**Imagination Technologies**  
**Software Design Engineer**

Kings Langley  
Jan. 2017 – April 2017

- Automated manual steps required to test small, constrained devices. Effectively this allowed the company to mass-test the hardware and remove any faulty units.
- Added functionality to Contiki RTOS to support features of Imagination's custom built constrained device.
- Expanded CI for hardware testing of Imagination's Ci40 IoT Hub.

**Imagination Technologies**  
**Graduate System Assurance Engineer**

Kings Langley  
Sept. 2015 – Jan. 2017

- Wrote a test automation suite that captured speakers' clock waves and compared them to ensure they stay in sync.
- Set up & maintained a hardware rack for CI, implemented hardware integration tests.
- Debugged critical issues related to packet fragmentation & faulty encryption in the 6LoWPAN driver stack of Contiki RTOS.

**IBM**  
**Software Engineer / Contractor**

Kraków  
Mar. 2013 - Sept. 2014

## Education

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**Jagiellonian University**  
Bachelor's Degree, Computer Science

Kraków  
2010 - 2013

**Jagiellonian University (Dropped out)**  
Master's Degree course, Computer Science, unfinished

Kraków  
2013 - 2015