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# I'VE WORKED AS...

#### **SOFTWARE ENGINEER** (a) CENTILI

Aug 2019-present

- -Developed a custom API Gateway system and accompanying YAML config format, utilizing it to streamline and serve all Centili's new public APIs.
- -Taken a significant part in developing a multi-tenant storefront app and adapting the infrastructure to make a successful launch on Google Kubernetes Engine, making it the company's first service to go live on the cloud.
- -Migrated parts of a live production system which processes 1.5 million payment transactions daily from RMI to HTTP, and then to cloud.
- -Containerized and upgraded CI/CD, supporting legacy JBoss apps, Spring Boot (Java 11 and Java 17), React and serverless projects (Cloudflare Pages).
- -Migrated the monitoring stack (Prometheus, Alertmanager, Grafana) to K8s.
- -Used Cloudflare Workers to cut loading time of payment pages for up to 2s.
- -Designed and developed a dozen greenfield Spring Boot microservices.
- -Fixed a few bugs and built a few pages using React for our admin dashboard.

# **TEACHING ASSOCIATE** (a) University of Belgrade, Faculty of Mathematics Oct 2022-Oct 2023

- -Taught practical classes and exercises for Computer Networks and Database Programming courses in 2022/23 (total 98 students in my groups).
- -Creating and administering practical exams for courses I taught.

#### I'VE STUDIED AT...

#### **UNIVERSITY OF BELGRADE**

FACULTY OF MATHEMATICS

MSc Informatics, 60ECTS | Nov 2022-Present

- -Took courses in algorithms, machine learning, software verification, software development and cryptography.
- -Built a 5-microservice <u>API Gateway system</u> in ASP.NET Core and set up cloud Kubernetes infrastructure (C#, Terraform, team).
- -Trained machine learning models for outlier detection (Python, pairwork).
- -<u>Added support for Go language</u> to an open source tool which generates language-invariant AST based on source code (C#, pairwork).

#### UNIVERSITY OF BELGRADE

FACULTY OF MATHEMATICS

BSc Informatics, 240ECTS | Oct 2018-Jun 2022

- -Built an app which <u>creates a dev profile</u> based on GitHub commit stats (Node.js, Angular, team).
- -Built a read-only Git GUI with GitLab support (C++, Qt, team).
- -Created a web dashboard for high school enrolment stats (R, pairwork).
- -Programmed a bouncing ball animation (OpenGL, pairwork).
- -Developed a configurable <u>flight path simulator</u> (Python, individual).

#### MATHEMATICAL GRAMMAR SCHOOL

SEP 2014-JUN 2018

- -Graduated from a high school for gifted students of maths, physics and CS.
- -My graduation thesis on data scraping and analysis was selected as one of the best informatics theses for school year 2017/18.

## I'VE USED...

Often: Java, Spring Boot, Docker, Jenkins, PostgreSQL, Kubernetes, Kotlin

Occassionally: C, Bash, Python, R, C++, Android, JavaScript, GCP, ArgoCD, Prometheus, Grafana, WildFly, ŁTEX, C#, ASP.NET Core, Node.js, React

**Sometimes:** Go, Terraform, Scala, Kafka, Buildpacks, Redis & Sentinel, Graylog, Prolog, TypeScript, Angular

#### I'VE ALSO STUDIED AT...

#### Petnica Summer Insitute Machine learning, 2019

I've participated in an intensive 10-day bootcamp on machine learning, organized by Microsoft Development Center Serbia and Petnica SC. After partaking in lectures and workshops, I've worked on a project which used a conditional generative adversarial network to generate metal album cover arts. Our testimonial is featured on the PSI:ML website.

#### **Petnica Science Center**

Psychology seminars, 2017-18

I've taken part in various lectures and workshops about research psychology. After writing practice papers and projects, I spent one year working on my own research on the role of emoticons and emojis in nonverbal irony, presented at the annual "Step Into Science" conference and published in Petnica Papers.

## I'VE GIVEN LECTURES AT...

**BEST's** <u>international course</u> (2023) on big data and data science in Belgrade, where I talked about databases and was principally responsible for organization and grading of the final project.

Computer Science Week (2018) at Mathematical Grammar School where I've taken part in creating one of the tasks used for participant selection and talked about exploratory data analysis to gifted high schoolers. I've also built a demo web app in R for the lecture.

# I'VE BUILT...

Stories (2017–2018)—Android lib & app  $\Omega \Omega$ 

Java Android Play! Framework PostgreSQL

A custom programming language for choose-your-adventure stories, Android player, no-code editor and online marketplace.

Lab Inventory (2020-present)—Web app 🗘

Kotlin Spring Boot PostgreSQL Thymeleaf

Inventory management app, initially used by local hospital's lab, currently serves a few different departments.

Upis Suite (2015–2021)—Deskop & web app  $\Omega \Omega$ 

Java Play! Framework Swing PostgreSQL Javascript

Web scraper for national high school enrolment data, customizable enrolment simulator, web app with SQL-like data plotting language, desktop app with visual query builder and custom performant plotter.

Notekeeper (2015–2018)—Android app 🖸 🗘

Java Android Play! Framework PostgreSQL

Productivity and collaboration app for groups of students attending the same school, facilitating note sharing.

MinimalHttpClient (2019)—Java library 🗘

Java

A no-dependencies Java implementation of HTTP/1.1 protocol, providing blocking and non-blocking API and fully customizable connection pool.

Video Compressor (2020-2021)—Web app 🗘

Kotlin Spring Boot PostgreSQL ffmpeg

Distributed web app which transcodes uploaded videos to reduce their size.

**BgBus** (2015–2018)—Android app **♠** 

Java Android

Offline journey planner for Belgrade, focusing on public transport and utilizing a purpose-built algorithm.

Chat Surveys (2019)—Web apps 🔿

R Tidyverse PostgreSQL Java Spring Boot

Hackathon project which transformed surveys to conversations with chatbot; proof of concept using Facebook Messenger.

CV (2020-present)—Document (7)

Font Awesome

This document is written entirely in LaTeX, built atop minimal document class.

...ALSO SOME NON-TECH STUFF...

**"Trapped in the Dollhouse"** (2016)—Short story My short story dealing with coming-of-age conformity won 2<sup>nd</sup> prize at "My English Book" literary competition.

**How To Spell Irony** (2018)—Research poster I've designed and built a <u>research poster</u> in Adobe InDesign, accompanying my research paper into nonverbal irony, presented at 17<sup>th</sup> annual Step Into Science conference.



National scholarship for students (2019/2020, 2020/2021, 2021/2022) by Ministry of Education, awarded to higher education students which maintain exceptional GPA (9.0 or higher out of 10) and have maximum study efficiency.

Award for best students of Pančevo (2022) by City of Pančevo, awarded to top 29 undergraduate and graduate students for academic excellency.

COMPETED AT...

RAF Hackathon (team, 2020) 3<sup>rd</sup> prize for <u>Chat Surveys</u>

Telekom Srbija Regional App Challenge (2018) Special prize for Stories

**RAF Challenge** (2017) Finalist with <u>UpisDesktop</u>

mt:s App Competition (2016) 2<sup>nd</sup> prize for Notekeeper

mt:s App Competition (2015) 2<sup>nd</sup> prize for <u>BgBus</u>

> National programming competitions (2014–2017) Qualified to the national level

National programming competitions (2012–2014) Qualified to Serbian Informatics Olympiad

National programming competitions (2011/12) 3<sup>rd</sup> prize at National competition

VOI UNTEFRED...

As a wiki ambassador (2018-2023): I worked with Wikimedia Serbia to establish new parterships at Faculty of Mathematics and Mathematical Grammar School and see them come to life.