

# Jakub Czajka

## WORK EXPERIENCE

JUNE 2023 – PRESENT

Google, Warsaw, Poland

*Software Engineer Tech Lead*

NOVEMBER 2023 – MAY 2025

Google, Warsaw, Poland

*Software Engineer III (L4)*

JUNE 2022 – OCTOBER 2023

*Software Engineer II (L3)*

I lead the development of a highly available, high throughput spatial scheduling system for the cluster management system Borg. It optimizes Google's fleet by recommending clusters where individual workloads should be scheduled. Highlights:

- Fix a bug manifesting across multiple systems which lead to workloads being placed in overutilized clusters.
- Integrate system to consider power utilization in cluster recommendations.
- Change cluster recommendations to reduce inter-cluster network traffic by up to 90%.

JANUARY 2021 – APRIL 2022

Amazon, Gdańsk, Poland

*Software Development Engineer (L4)*

Development of an on-device processing engine for Amazon Alexa. The engine uses machine learning to process user's voice on many different Alexa architectures, often under heavy resource constraints.

JUNE 2020 – SEPTEMBER 2020

Amazon Web Services, Berlin, Germany

*Software Development Engineer Intern*

Research and implement a prototype of a user interface for SCRUM planning sessions.

JUNE 2019 – SEPTEMBER 2019

European Organization for Nuclear Research (CERN), Gevena, Switzerland

*Software Engineering Intern*

Development of a platform for self-teaching FESA - a real-time framework for controlling and monitoring particle accelerators.



Warsaw, Poland



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## EDUCATION

OCTOBER 2017 – JANUARY 2021

AGH University of Science and Technology, Kraków, Poland

*Bachelor's degree in Computer Science*

- Final grade: 5.0 (GPA 4.71, top 10%).
- Multiple scholarships for excellent grades.
- Thesis: "Framework for distributed big volume data analysis from LHC ALICE experiment (CERN) using O2 software package".

## PUBLICATIONS

- **J. Czajka**, J. Otwinowski, and J. Kitowski, "Non-Intrusive Data Inspection for Message-Based Systems", *Comput. Inform.*, vol. 40, no. 4, pp. 796–814, Dec. 2021.  
<https://doi.org/10.31577/cai.2021.4.796>.

## PERSONAL PROJECTS

My projects are available at [git.ekhem.eu.org](http://git.ekhem.eu.org). Highlights:

- [gym.git](http://gym.git) - HTTP interface for a database tracking gym progress. **Technologies:** HTTP Nginx server with shell scripts connected through fastCGI, Postgres.
- [gdrive\\_knife.git](http://gdrive_knife.git) - Swiss army knife for working with Google Drive. Provides commands for encrypting, archiving and uploading files. **Technologies:** Python, OAuth, Google Drive API, symmetric cryptography.
- [server.git](http://server.git) - Configuration files for many services deployed on a server. **Technologies:** Postfix, Dovecot, Postgres, fail2ban, Matrix and more.
- [metadata.git](http://metadata.git) - Metadata files (descriptions, hooks etc.) for the other git repositories. Contains many Ansible scripts for deploying other server's services.