jakubjantosik

software engineer

about

Eindhoven
Netherlands

jakub.jantosik@gmail.com

languages

Proficient in English
Basic German

programming

Python
JavaScript, TypeScript
(ECMAScript, node.js)
React, Vue 2
C, Rust, Golang
Vulkan

devops

Terraform, Serverless
Codebuild &
Codepipeline, Github
Actions
Docker, Kubernetes
MLOps

interests

travelling, programming in general, web development, computer graphics, computer vision, fitness, tennis, game development, Linux, web design

education and certificates

2017	**AWS Certified Developer – Associate** Amazon certification	Amazon Web Services
2017	**Programming in HTML5 with JavaScript and CSS3** Exam 480, Microsoft certification	Microsoft
2014-2016	**Mgr. - Applied Informatics** Thesis: Robot Karel (Javascript interpreter)	Faculty of Mathematics, Physics and Informatics
2011-2014	**Bc. - Applied Informatics** Thesis: Vector editor for lower secondary school	Faculty of Mathematics, Physics and Informatics
2011	**National comparative exams** NSZ Mathematics	SCIO
2008	**First Certificate of English** Cambridge ESOL Level 1 Certificate	University of Cambridge - ESOL Examinations
2003-2011	**University preparation**	Gymnázium Bilíkova

experience

Signify - Senior Cloud Engineer

- Since May 2021
- Lead a Cloud Guild, fostering a culture of continuous learning and cloud innovation within the company
- Design and implement a highly available and scalable architecture using AWS services, including ECS (Fargate), Lambda, Elasticache, Elastic Beanstalk, DynamoDB, MemoryDB
- Work with LLMs, including prompt engineering and building a prompt evaluation solution
- Integrate OpenTelemetry for enhanced observability and tracing of microservices
- Lead an effort in developing and deploying the application using DevOps best practices, including continuous integration and delivery, infrastructure as code, and monitoring and alerting
- Reduce costs by optimizing the AWS infrastructure and implementing serverless practices for non-production environments
- Mentor junior engineers and provided technical guidance on best practices for software development

- Improve legacy solutions by adding unit tests, linting and automation scripts using Terraform, Docker, Bash and Python to streamline the deployment process
- Participate in MLOps workshop using Sagemaker

IKEA - Full Stack/Cloud Engineer

- 2020-2021
- Developed the new generation kitchen planner
- Designed microservices with serverless architecture to achieve robust systems
- Developed a stable and performant furniture management portal and the 3D kitchen planner using modern frontend/3D frameworks - React, 3dvia
- Worked with: React, AWS, DynamoDB, MysQL, Neptune (graph database), Lambda, Serverless, Serverless Framework, NodeJS, JavaScript, CI/CD (CodeBuild, Bitbucket pipelines), Microservice, Serverless Architecture, TDD (Test-driven development)
- Creation of reusable node modules
- Delivered working prototypes and proof-of-concepts

Philips - Cloud Engineer

- 2017-2020
- Developed new generation HealthSuite platforms
- Designed microservices with serverless architecture to achieve robust systems
- Worked with: AWS, Linux, DynamoDB, Lambda, CloudFormation, Serverless, Serverless Framework, NodeJS, JavaScript, TypeScript, JMeter, Jenkins, CI/CD, Microservice, Serverless Architecture, TDD (Test-driven development)
- Fully automated build pipeline process maintaining security and HIPAA, GDPR compliances
- Heavy focus on IoT and RESTful APIs, infrastructure and simple deployment
- Creation of reusable node modules
- Delivered working prototypes and proof-of-concepts

Accenture - Software Engineer

- 2016-2021
- Worked on prototypes using Tensorflow, React, Angular 2

personal projects

Real-Time Collaborative Code Interview Platform

- Work in progress
- Developing a web application enabling real-time collaborative coding interviews using Conflict-free Replicated Data Types (CRDTs) for synchronized editing
- Implemented real-time code synchronization using CRDT library Automerge allowing interviewers to create and share programming tasks directly in the platform
- Containerized and deployed the application using Kubernetes for scalable and reliable infrastructure
- Technologies: CRDT, Kubernetes, Real-time Collaboration, Svelte, NodeJS

Aquiche - Async Python Caching Library

- Developed a high-performance Python package providing robust async caching with comprehensive features
- Implemented thread-safe and async-compatible caching mechanism supporting both sync and async functions
- Prevented cache stampede through intelligent request coalescing
- Key Features:
  - Flexible expiration strategies
  - Negative caching support
  - Full type annotations
  - High test coverage
- Designed for scalable and efficient caching in complex application architectures
- Technologies: Python, Poetry

Distinguishing Paintings From Photographs

- Using multiple features application differentiates the images of real scenes from the paintings
- Option to train the classifier with the custom database of images
- Implementation is based on paper written by Florin Cutzu, Riad Hammoud, Alex Leyk
- Technologies: Matlab