Kris Konina

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in linkedin

github

Work history

2019-12 - Current, IT Consultant, Organization for Security and Co-operation in Europe, Vienna

- Designed, built, and maintained a scalable, efficient, and reliable platform for Trial Monitoring Program in the Western Balkans, utilizing advanced Python methodologies to enhance efficiency and reliability.
- Coordinated with project management staff on timelines and scope, leading the backend team in the creation and implementation of database schema and data models.
- Managed the technical infrastructure, including designing and building advanced systems with Python for data access and program operation in a leading cloud environment.
- Assured code quality and organization by writing automated tests and maintaining a hands-on approach to the development process.

2022-06 - 2022-11, IT Consultant, International Organization for Migration, Greece

- Led a team of Python developers in the development of a platform designed for evaluation and monitoring of internal projects, following the principles of agility and efficiency.
- Collaborated with designers to create an intuitive UI/UX design, demonstrating a deep understanding of customer needs.
- Built and maintained a comprehensive system for data transformations, analysis and visualization using different data storage types and services (SQL and NoSQL).
- Implemented modern DevOps best practices, including automated CI/CD pipelines, ensuring successful project deployment on Kubernetes infrastructure bootstrapped with Terraform.
- Monitored performance through Grafana with Loki system integration, demonstrating strong experience in building B2B Saas software.

2019-09 - 2021-11, Co-founder, Laima, Warsaw, Poland

- Designed and implemented a robust, scalable SaaS architecture offering automated management services to outpatient clinics, using Python and AWS cloud services.
- Led the backend team in maintaining code quality, organization, and automation through the creation of a CI/CD pipeline with GitLab CI/CD, Terraform, and Kubernetes.

- Provided guidance and support to new developers, becoming the go-to person for all technical questions in the back-end.
- Demonstrated a start-up mindset by recognizing business opportunities and tailoring service offerings to address them.

2018-01 - 2019-08, Lead Software Engineer, B2BON Sp. z o. o, Warsaw, Poland

- Led the design and implementation of a Python-based complex IT system that processed real-time sales data from retail stores across Poland, providing insights and analytics for FMCG customers. The system, deployed on the AWS cloud, handled massive amounts of big data, allowing for comprehensive analysis and reporting.
- Ensured efficient and reliable software deployments and monitoring using a combination of AWS services, GitLab, and Sentry. Implemented cloud automation techniques, such as infrastructure-as-code and automated scaling, to streamline operations and optimize system performance.
- Supervised and mentored junior backend Python developers and interns, guiding them in their tasks and fostering their professional growth within the team.
- Developed and utilized a custom-built business analytics system tailored to the specific needs of the organization. The system incorporated advanced data modeling, visualization, and reporting capabilities to enable data-driven decision-making.
- Implemented a custom financial reporting system that streamlined financial data collection, analysis, and reporting processes. The system facilitated accurate and timely financial reporting and provided comprehensive insights for strategic financial planning.

2015-07 - 2017-12, Project Manager; Software Developer; Business Communicator, 4bsystems Sp. z. o. o., Warsaw, Poland

- Designed, developed, and tested new Python-based web applications, leveraging NoSQL databases and Node.js to build specialized software solutions for corporate clients, including scalable microservice-based products. Analyzed and successfully resolved technical issues in deployed projects, consistently producing high-quality, maintainable, and scalable code.
- Demonstrated expertise in leading the technical team, which encompassed the frontend team, database administrator, and external contractors, to achieve technical excellence and project success. Actively managed and fostered relationships with overseas clients, ensuring seamless communication and meeting their specific development requirements.
- Continuously identified areas of improvement to existing software, algorithms, and processes, driving enhancements and optimizing performance to deliver cutting-edge solutions. Employed a meticulous approach to crafting clean, readable, and highly scalable code, adhering to industry best practices.

2014-12 - 2015-06, IT Consultant, District of Lubliniec Office, Lubliniec, Poland

- Successfully designed and implemented a real-time road traffic data parsing project, showcasing an in-depth understanding of Python's intricacies and nuances.
- Leveraged OpenCV and scikit-learn to create and train a robust Machine Learning model for efficient vehicle count and recognition, highlighting expertise in utilizing advanced libraries for computer vision and machine learning tasks.
- Demonstrated experience in handling big data projects through the development and execution of the performant vehicle count and recognition system, leveraging scalable approaches and techniques.

2013-01 - 2014-11, Research Assistant, University Of Virginia, Charlottesville, USA

- Developed new software to catalogue and publicly display protein structures (LabDB), demonstrating solid experience with design and building advanced systems with Python.
- Maintained configuration of preexisting software applications, adhering to good software engineering practices.
- Acquired and processed real time data from X-ray crystallography measurements of protein samples.
- Wrote and developed software documentation.
- Communicated with protein structure depositors, incorporated their feedback in the developed products.

2010-01 - 2012-12, Full Stack Developer, Keos Media, Lubliniec, Poland

- Developed and tested a new full-stack Python-based software delivering basic operational functionalities for an outpatient clinic.
- Configured and managed web servers, ensuring the reliability and scalability of the application.

Open source contributions

- **Postschema** (github) (WIP)
  A custom web framework built on top of aiohttp, using PostgreSQL and Redis as core dependencies. The framework comes with an ORM that automatically translates models into views, providing a seamless development experience. Security is a key feature of the framework; it comes with plenty of security features out-of-the-box, including Role-Based Access Control (RBAC) for fine-grained access control. Additionally, Postschema is equipped with a plugin system that will allow developers to extend the functionality of the framework with ease.

Publications

- **State-of-the-Art Data Management: Improving the Reproducibility, Consistency, and Traceability of Structural Biology** (pubmed)

  LabDB as a comprehensive data management system designed for laboratories of various sizes to track and analyse experiments. It has the capability to harvest data from laboratory instruments and manual input, and can be used for biochemical, biophysical and crystallographic experiments. It has been used to manage data for over 1200 deposits to the Protein Data Bank, and provides features for data mining, inspecting potential sources of irreproducibility and warnings about incomplete and inconsistent experimental data.

- **Crystal structure of a GNAT superfamily phosphinothricin acetyltransferase** (pdb)

  Crystal structure of a GNAT superfamily phosphinothricin acetyltransferase (Pat) from Sinorhizobium meliloti in complex with AcCoA

Education

2007-10 - 2010-06

Bachelor of Science: Biotechnology

Medical University of Silesia - Katowice

2010-10 - 2012-10

Master of Science: Bioinformatics

Jagiellonian University - Krakow