

Janar Oismaa

SENIOR PYTHON FULLSTACK ENGINEER

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SUMMARY

With over **10 years of professional experience in software development**, I specialize in crafting **state-of-the-art products** using **Python** and its powerful frameworks, including **Django**, **FastAPI** and **Flask**. My expertise extends to **JavaScript/TypeScript**, along with their robust frameworks such as **Node.js/Express.js** for backend development and **React**, **Vue**, and **Angular** for building dynamic, responsive frontend applications.


I am also highly skilled in **data engineering** and **AI/ML**, leveraging tools like **Pandas**, **NumPy**, and **SQLAlchemy** for data processing and analysis, as well as **TensorFlow**, **PyTorch**, and **Scikit-learn** for building and deploying machine learning models. I have designed end-to-end AI pipelines, implemented predictive analytics, and developed intelligent solutions that drive actionable insights and enhance decision-making.

My cloud expertise spans leading platforms like **AWS**, **Azure**, and **GCP**, enabling me to design and deploy scalable, high-performance solutions in distributed environments. From data-driven applications to cutting-edge AI/ML implementations, I excel in building systems that are both innovative and reliable.

Driven by a relentless passion for perfection, I consistently push my limits to deliver **exceptional results**, combining technical excellence with innovative problem-solving to meet and exceed project goals. Whether it's developing advanced AI models, designing intelligent data pipelines, or creating impactful applications, I thrive on building solutions that make a difference.

EXPERIENCE


Senior Full Stack Consultant

 Jan 2025 – Jul 2025

Merkle DACH (Zurich, Switzerland)

- Engineered a scalable, multi-region eCommerce platform for heated tobacco products across APAC markets using **FastAPI (Python)** for backend services and **React** with TypeScript for the frontend achieving **99.98% uptime** and supporting **500K+ monthly active users**.
- Engineered asynchronous, non-blocking **RESTful APIs** using **FastAPI**, **Pydantic models**, and **asyncpg** for PostgreSQL, achieving **sub-150ms latency** on critical endpoints and supporting concurrent request handling under high load with **async/await I/O patterns**.
- Designed performant, responsive user interfaces with **React** and **Redux Toolkit**, reducing **first meaningful paint** and improving overall **Lighthouse performance scores**.
- Implemented OAuth2.0-compliant access control with **FastAPI's OAuth2PasswordBearer**, **JWT-based stateless session management**, and RBAC middleware to secure administrative and customer-facing APIs.
- Containerized microservices using **Docker (multi-stage builds)** and deployed to **Amazon EKS** with **Helm charts**, leveraging **AWS Fargate** for cost-effective, serverless container execution and **Elastic Load Balancer (ALB)** for secure HTTPS traffic routing.
- Automated infrastructure provisioning with **Terraform** and managed CI/CD pipelines via **GitHub Actions**, integrating **Bandit**, **Pytest**, **ESLint**, and **Cypress**—resulting in **faster release cycles** and near-zero downtime deployments.
- Provisioned and managed cloud infrastructure using **Terraform (v1.6)**, automating deployments of **Amazon RDS (PostgreSQL 15)**, **Amazon S3 (static assets & backups)**, **Amazon CloudFront** (global CDN), and **AWS Certificate Manager** for TLS termination.
- Designed GitHub Actions CI/CD workflows with environment-specific matrix builds, artifact caching, and deployment gating; integrated **Bandit**, **Flake8**, **Black**, **ESLint**, **Cypress**, and **Pytest** to enforce code quality and test rigor—accelerating release velocity.
- Instrumented observability using **Amazon CloudWatch Logs**, **CloudWatch Metrics**, **Prometheus + Grafana dashboards**, and the **ELK Stack (Elasticsearch, Logstash, Kibana)** for full-stack telemetry and anomaly detection, reducing MTTR.
- Implemented **test-driven development (TDD)** practices using **Pytest (unit + integration tests)** for backend and **Jest + React Testing Library + Cypress** for end-to-end frontend testing, maintaining **90%+ coverage** and decreasing post-deployment bugs.
- Orchestrated region-specific feature delivery using **LaunchDarkly feature flags** and **i18n internationalization pipelines**, collaborating across **legal, compliance, marketing, UX, and DevSecOps** teams to reduce go-to-market time for new regional releases.
- Established engineering standards for code reviews and branching via **GitFlow**, semantic versioning, and enforced linting and formatting via **pre-commit hooks (Husky, Lint-Staged)**, improving PR turnaround time and reducing code review churn.
- Mentored a team of 4 engineers on **FastAPI dependency injection patterns**, **modular service design**, **React component architecture (Container/Presentational pattern)**, and **AWS-native DevOps tooling**, improving team throughput and enabling seamless cross-functional contributions.

Senior Full Stack Engineer


 Jun 2021 – Jan 2025

Helmes (Tallinn, Estonia)

- Led the development and revamp of 5 innovative platforms**, including a telemedicine service and a telecommunication service, utilizing powerful backend frameworks like **Django** and **FastAPI**. Integrated these with modern frontend technologies such as **React/Next.js**, and **Vue.js** to deliver exceptional user experiences and optimized data management solutions.
- Developed and deployed large-scale systems comprising over 200 RESTful APIs** using **Django REST Framework** and **FastAPI**. Leveraged **AWS platforms**, including **EC2** and **Lambda**, to ensure scalability and efficiency. **Implemented GraphQL schemas and resolvers** using **Graphene**, enabling flexible, efficient querying and seamless data retrieval, reducing client-server communication time by **30%** across multiple client applications.

- Integrated **3rd-party** healthcare and banking **APIs**, including **EMR platforms**, **IoT devices**, and **payment gateways** such as **Stripe** and **PayPal**.
- **Designed and documented APIs with Swagger and OpenAPI** using **drf-yasg** and **FastAPI's built-in OpenAPI support**, streamlining development workflows and enhancing API clarity for seamless integration.
- **Utilized Django ORM to streamline database interactions**, enabling efficient querying and data manipulation through Pythonic abstractions. Optimized complex queriesets, reducing query execution time by **40%**, and ensured seamless integration with PostgreSQL for reliable data management in production.
- Developed user interfaces of 40+ subpages for both of the web applications and mobile app based on **Figma** and **Adobe XD** designs using **React/Next.js**, **React Native**, **Redux**, **Vue 3**, **Composition API**, **Webpack**, **Vue CLI**, **Vuex**, **Vuetsify**, **TypeScript**, **Material-UI**, and **Tailwind CSS**.
- Handled **asynchronous job** smoothly using **Django Signals** for event-driven triggers, **Celery** for task queues, and **Redis/RabbitMQ** as the message broker, efficiently managing over 10,000 tasks per day.
- **Architected and deployed a robust real-time data processing pipeline leveraging Apache Kafka**, integrating with **Django** and utilizing Python libraries such as **confluent-kafka-python** for producer-consumer workflows and **Faust** for stream processing. Processed over **1 million events daily** with sub-second latency to power live analytics and drive real-time decision-making in critical business operations.
- **Designed and implemented robust authentication and authorization mechanisms** using **OAuth 2.0**, **OpenID Connect**, and **JWT**, seamlessly integrating with **Django Rest Framework** and Python libraries like **PyJWT** and **Authlib**. Ensured compliance with **HIPAA** and **GDPR** regulations, achieving a **100% success rate** in securing sensitive data and safeguarding user privacy across all backend systems.
- **Developed and optimized scalable data models** using **RDBMS** technologies like **MySQL** and **PostgreSQL**, and **NoSQL** databases such as **MongoDB** and **Cassandra**. Leveraged Python libraries like **SQLAlchemy**, **Pandas**, and **PyMongo** to manage and analyze over **100,000 patient records** and financial data entries, ensuring data integrity, efficient processing, and actionable insights for data-driven decision-making.
- **Built and deployed predictive models** using **Scikit-learn**, **TensorFlow**, **Matplotlib** and **Keras**, achieving up to **95% accuracy** in tasks such as patient readmission prediction data visualization. **Implemented NLP pipelines** using **spaCy** and **Hugging Face Transformers** to process and analyze large volumes of unstructured text, enabling sentiment analysis and automated document classification.
- Adopted **Test-Driven Development (TDD) approach**. **Implemented comprehensive testing frameworks** for both frontend and backend systems, utilizing tools like **Jest** and **Cypress** for **React** and **Vue.js** applications, and **Pytest**, **Unittest**, and **Django Test Framework** for **Django** and **FastAPI** backends. Developed and executed **unit tests**, **integration tests**, and **end-to-end tests**, ensuring thorough validation of RESTful APIs, database interactions, and authentication mechanisms.
- **Leveraged cloud platforms like AWS and GCP** to build, deploy, and scale applications, utilizing services such as **AWS Lambda**, **EC2**, **S3**, **RDS**, and **CloudWatch**, as well as **Google Cloud Storage**, **BigQuery**, **Pub/Sub**, and **Cloud Functions**. Optimized infrastructure for high availability and performance, enabling seamless deployment of both frontend and backend services in distributed environments.
- **Actively contributed to DevOps processes**, automating CI/CD pipelines using tools like **Jenkins** and **GitHub Actions** to streamline deployments for both frontend and backend systems. Managed containerization with **Docker** and orchestration with **Kubernetes**, ensuring smooth application scaling and reliability. Leveraged **Terraform** and **CloudFormation** for infrastructure as code, and implemented monitoring and logging solutions using **AWS CloudWatch**, **Prometheus**, and **Grafana**, reducing deployment time by **50%** and improving system uptime.
- Leveraged **Jira** and **Slack** for project management within **Agile sprints** of 2 weeks.


Senior Full Stack Developer

 Feb 2019 - Jun 2021

Andersen Lab (Tallinn, Estonia)

- **Played a key role in backend and frontend development** for a **transportation and logistics solution** handling an average of **5,000 transportation requests per day**, seamlessly transitioning to remote work from March 2020.
- **Integrated Python and Django to architect a highly scalable backend**, implementing robust APIs and microservice communication protocols to handle high traffic and complex workflows efficiently. Leveraged best practices in system design and monitoring to achieve and maintain a **99.5% system uptime rate**, ensuring reliability and performance for critical operations.
- **Developed high-performance RESTful APIs with Django REST Framework (DRF)** to streamline backend services and enable seamless data exchange. Integrated **Apache Kafka** for **real-time event streaming** and implemented **asynchronous task workflows** using **Celery** and **Redis**, optimizing task execution and ensuring timely delivery of transportation operations.
- **Designed and optimized advanced SQL queries and normalized database schemas** using **PostgreSQL**, enabling efficient data storage, retrieval, and processing for over **500,000 records**. Utilized **window functions**, **CTEs**, and **indexing techniques** to support **real-time reporting**, **data aggregation**, and **predictive analytics**, enhancing decision-making and operational efficiency in data-driven workflows.
- **Developed highly interactive frontend components** using **React**, leveraging **React Hooks**, **Context API**, and **Redux** for state management to ensure seamless integration with Django backend APIs. Optimized performance with **lazy loading**, **code splitting**, and **memoization**, delivering a user interface that boosted engagement by **80%**.
- **Leveraged Apache Spark for large-scale distributed data processing**, implementing ETL pipelines and real-time analytics on transportation data. Used **PyTorch** to build and train predictive models, improving demand forecasting and optimizing resource allocation.
- **Demonstrated expertise in AWS services and CDKs**, including **EC2**, **S3**, **CloudFront CDN**, **IAM**, **Amplify**, and **Lambda**, to architect, deploy, and scale cloud-based solutions. Utilized **infrastructure as code (IaC)** principles with **AWS CDK** to automate deployments, enhance scalability, and optimize resource utilization, ensuring high availability and performance in production environments.
- **Implemented and maintained comprehensive testing frameworks** using **Pytest**, **Unittest**, and **Selenium**, ensuring robust validation of functionality, performance, and edge cases. Integrated automated testing pipelines with **CI/CD workflows** to streamline quality assurance, leveraging tools like **coverage.py** for detailed code coverage analysis and reporting, ensuring consistent release quality and accelerated development cycles.

Full Stack Developer IV


 Aug 2017 – May 2019

Chudovo (Castrop-Rauxel, Germany)

- **Contributed to the development of a cutting-edge education technology platform**, collaborating closely with a team of 9 developers to deliver a high-quality solution.
- **Engineered a responsive and dynamic frontend** using **React**, integrating seamlessly with backend **APIs**. Implemented advanced React features like **Hooks**, **Context API**, and **React Router**, ensuring smooth user interactions and enhanced user experience.

- **Spearheaded backend development** using **Node.js/Express.js**, implementing efficient and secure database interactions with **TypeORM**. Streamlined the development process with a fully automated **CI/CD pipeline**, incorporating tools like **Mocha**, **Chai**, and **GitHub Actions** to achieve an impressive **90% average test coverage** and significantly reduce deployment errors.
- **Designed and deployed a Docker-based containerization strategy**, resulting in efficient development workflows and receiving overwhelmingly positive feedback from over **4,000 students**.
- **Integrated monitoring and logging solutions** to ensure high platform availability, leveraging tools like **AWS CloudWatch** and **ELK stack** for real-time performance tracking and issue resolution.
- **Proficient in Agile methodologies**, actively participating in daily stand-ups, sprint planning, and sprint reviews, fostering rapid prototyping and collaborative problem-solving. Delivered incremental improvements to the platform on a **bi-weekly release schedule**, consistently meeting project deadlines and client expectations.

Software Developer


 Sep 2014 – Aug 2017

Ronas IT (Tallinn, Estonia)

- **Developed and maintained web applications** using **Python** with frameworks like **Django** and **Flask**, implementing robust backend logic and ensuring scalable, maintainable, and reusable code structures for business-critical applications.
- **Created responsive and user-friendly frontend interfaces** using **HTML5**, **CSS3**, **JavaScript**, and libraries like **jQuery** and **Bootstrap**, enhancing user engagement and ensuring seamless performance across multiple devices and browsers.
- **Designed and consumed RESTful APIs**, enabling efficient communication between frontend and backend systems. Integrated third-party APIs for functionalities such as payment processing, geolocation services, and social media logins.
- **Designed, normalized, and optimized database schemas** using **MySQL** and **SQLite**, ensuring efficient data retrieval through advanced query optimization techniques and indexing strategies.
- **Collaborated closely with cross-functional teams**, including designers, QA engineers, and product managers, in an **Agile development environment**, participating in **daily stand-ups**, **sprint planning**, and **retrospectives** to deliver high-quality features on time.
- **Tested and debugged applications** rigorously, writing comprehensive **unit tests** with **Unittest** and **Pytest** to validate functionality. Conducted code reviews to uphold high standards of code quality and reliability.
- **Deployed and managed applications** on production servers using tools like **Apache**, **Nginx**, and **Gunicorn**. Automated deployment workflows with shell scripts, ensuring reliable and efficient updates with minimal downtime.
- **Utilized Git for version control**, contributing to collaborative projects and maintaining a clean and organized codebase. Resolved merge conflicts and implemented branching strategies to streamline development processes.

EDUCATION

Bachelor of Computer Science

 Sep 2011 - Aug 2014

Tallinn University

SKILLS

Programming Languages

- Python, JavaScript, TypeScript, SQL, HTML5, CSS3, Bash

Frameworks and Libraries

- **Backend:** Django, FastAPI, Flask, Django REST Framework (DRF)
- **Frontend:** React, Next.js, Vue.js, Angular, Redux, Vuex, Tailwind CSS, Material-UI, Vuetify
- **AI/ML:** TensorFlow, PyTorch, Scikit-learn, Keras, Hugging Face Transformers, spaCy

Databases

- **RDBMS:** PostgreSQL, MySQL, SQLite
- **NoSQL:** MongoDB, Cassandra
- **ORMs:** SQLAlchemy, Django ORM

Data Analysis and Visualization

- Pandas, NumPy, Matplotlib, Seaborn

Cloud Platforms

- AWS (Lambda, EC2, S3, RDS, CloudWatch, Amplify, IAM, CloudFront CDN), Google Cloud Platform (BigQuery, Pub/Sub, Cloud Functions, Cloud Storage)

DevOps and CI/CD

- Docker, Kubernetes, Jenkins, GitHub Actions, Terraform, CloudFormation, AWS CDK
- Monitoring and Logging: Prometheus, Grafana, AWS CloudWatch, ELK Stack

Big Data and Real-Time Processing

- Apache Kafka, Apache Spark, Faust

Testing

- Pytest, Unittest, Selenium, Jest, Cypress, coverage.py, Django Test Framework

APIs and Protocols

- RESTful APIs, GraphQL (Graphene), OpenAPI, Swagger
- Authentication: OAuth 2.0, OpenID Connect, JWT

Version Control and Collaboration

- Git, GitHub, GitLab, Bitbucket
- Agile Methodologies: Scrum, Kanban (Jira, Slack)

Containerization and Virtualization

- Docker, Docker Compose, Kubernetes, Gunicorn, Nginx, Apache

Project Management and Agile Tools

- Jira, Slack, Confluence

CERTIFICATIONS

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| • Python Certification | Hackerrank.com |
| • Data Engineer Certification | Datacamp.com |
| • AWS Certified Solutions Architect | Amazon.com |
| • Backend Certification | Triplebyte.com |
| • Frontend Certification | Triplebyte.com |
| • Javascript Certification | Hackerrank.com |
| • React Certification | Hackerrank.com |
| • Angular Certification | Hackerrank.com |
| • Problem Solving Certification | Hackerrank.com |