Henry Koekemoer

Full-Stack Software Developer

CONTACT

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CORE SKILLS

Front-end: TypeScript, React, Angular, Ionic, PWA

Back-end: Node.js, Django, AWS Lambda, Python, Rust

Databases: MongoDB, PostgreSQL, MySQL

DevOps: Docker, AWS, Azure, GCP, CI/CD

Testing: Cypress, Mocha, Pytest

Other: REST, GraphQL, WordPress

LANGUAGES

English - Native

Afrikaans - Native

German - Advanced (C1.1)

ADDITIONAL INFO

EU Work Eligibility: South African passport with valid German residence/work permit

Interests: Open-source, IoT innovations, Rockclimbing

Professional Profile

Full-stack software engineer with 6+ years' experience delivering scalable IoT, SaaS, and data-driven platforms for global retail, sustainability, and fintech sectors. Proven track record of improving deployment efficiency, streamlining IoT device setup, and developing analytics-driven applications used across multiple countries. Adept at building full-stack solutions from concept to production, integrating modern frameworks (React, Angular, Django, Node.js, Rust) with cloud infrastructure (AWS, Azure, GCP) in agile, cross-functional teams.

Key Achievements

- Optimised DevOps pipelines at Reverse Resources, enabling faster feature delivery to enterprise clients
- Built predictive analytics system for IoT geyser controllers at Sensor Networks, helping reduce client energy costs.
- Developed cross-platform mobile and web tools for retail IoT devices at Rapitag, improving reliability and reducing maintenance downtime.
- Delivered scalable SaaS features for global fashion brands, supporting textile waste traceability across multiple continents.

Professional Experience

Rapitag GmbH - Full-Stack Developer

Nov 2023 - Feb 2025 | Munich, Germany

- Developed Rust and Python applications for edge devices (Raspberry Pi) in Azure IoT Edge environments, integrating seamlessly with hardware and embedded systems.
- Collaborated closely with hardware engineers to deliver end-to-end IoT solutions powering retail's first smart tag technology for secure mobile checkout.
- Built robust monitoring and alerting systems to enable real-time performance insights.
- Conducted performance testing, profiling, and debugging to ensure optimal stability and efficiency under production conditions.
- Provided rapid troubleshooting for customer-reported device issues, reducing downtime and improving operational reliability.
- Recognised for exceptional initiative, adaptability, and high-quality results even under changing requirements and tight deadlines.

Technologies Used: Rust, Python, Raspberry Pi, Azure IoT Edge, React, Node.js

Reverse Resources - Full-Stack Developer

Sep 2022 - Oct 2023 | Remote (Estonia)

- High-impact SaaS features for tracking and reusing textile production leftovers for global fashion brands.
- Collaborated with stakeholders across continents, ensuring smooth integration for garment suppliers and recycling partners.
- Optimised CI/CD pipelines and DevOps workflows to improve deployment efficiency and release cycles.

Technologies Used: FastApi, Node.js, React, PostgreSQL, AWS, Docker, Github CI/CD

JoinPanda - Back-End Developer

Feb 2022 - Sep 2022 | Remote (South Africa)

- Led Django backend development for mental health platform, enabling real-time chat and video calls between users and therapists.
- Integrated AWS services for improved scalability and performance during peak usage periods.
- Collaborated on data analytics features to support therapist performance tracking.

Technologies Used: Django, AWS, PostgreSQL, Docker

Sensor Networks - Full-Stack Developer

Mar 2019 - Apr 2022 | Cape Town, South Africa

- Led Angular front-end development for CMS used by major insurance and banking clients.
- Developed hybrid/PWA installation app, streamlining IoT device setup.
- Built web app for IoT geyser control and implemented machine learning-driven analytics to support energy cost reduction.
- Maintained and improved WordPress marketing site.

Technologies Used: Angular, React, Node.is, Python, AWS Lambda, PostgreSQL, WordPress

Freelance Software Developer

Jan 2017 - Apr 2019 | South Africa

- Created hybrid mobile app for fuel and oil supply tracking with server-side API and MySQL database.
- Built automated legal billing solution with OCR and content recognition, reducing manual processing time.

Technologies Used: Ionic, MySQL, OCR, REST APIs

Courses & Certifications

FreeCodeCamp - Full-Stack Developer Certification & specialised modules (2019-2021):

- Data Analysis with Python, Scientific Computing with Python
- APIs and Microservices,
- Data Visualization,
- Front-end Libraries,
- JavaScript Algorithms and
- Data Structures,
- Responsive Web Design

Udemy (2018-2021):

- Algorithmic Trading A–Z with Python,
- Machine Learning & AWS;
- Deep Learning with Python;
- Machine Learning with Python;
- Penetration Testing;
- Full-Stack Web Development

Lingoda - German Language Course, Level C1.1 (Jul 2025)

Education

High School Overkruin – National Senior Certificate (2009)