

NATNAEL ABAY AKALU

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Dubai, United Arab Emirates

SOFTWARE ENGINEER

I am a software engineer with over 4 years of industry experience, specializing in building large-scale data pipelines and sophisticated software solutions. I have contributed to the development of systems that support complex data processing and enable seamless business operations.

SKILLS

Python	Airflow	Scrapy
SQL	DBT	Fast API
Django	BigQuery	Docker

PROFESSIONAL EXPERIENCE

Bilby.ai **Nov 2023 - Present**
Data Engineer

Bilby.ai is an AI-driven platform specializing in analyzing government documents to predict policy changes and regulatory developments. By leveraging natural language processing, machine learning, and real-time data aggregation, it provides actionable insights for businesses and investors to navigate complex regulatory landscapes effectively.

Accomplishments:

- Designed and maintained scalable data pipelines to process large-scale government documents and datasets, enabling advanced policy signal extraction.
- Implemented and optimized natural language processing (NLP) workflows, including sentiment analysis and thematic identification, to drive actionable insights for clients.
- Developed and integrated enterprise-grade APIs, facilitating seamless access to millions of data points for trading, risk assessment, and decision-making.
- Ensured system performance and scalability by optimizing ETL processes and leveraging technologies like Python, BigQuery, and the GCP stack.
- Collaborated with cross-functional teams to align technical deliverables with business objectives, enhancing the platform's impact on early policy prediction.

Pinely International **Dec 2023 - Dec 2024**
Software Engineer

An Upwork agency and tech solutions provider offering custom software development, IT consulting, and developer outsourcing to drive digital transformation.

Accomplishments:

- Generated over 50K USD in revenue for the company with in just under 6 months.
- Worked with countless number of teams from different parts of the world to deliver quality software and provide solution for a wide range of clients.
- Lead a team of 4 in building and end to end IPTV solution, that is a B2B that sells clients a large dataset of movies along side with a scalable streaming infrastructure.

Software Engineer

Lokafy connects travelers with local residents for personalized walking tours, offering authentic and immersive experiences in over 200 cities worldwide. By pairing travelers with knowledgeable locals, Lokafy helps users discover hidden gems and gain unique insights beyond typical tourist attractions.

Accomplishments:

- Developed and maintained scalable web applications using Django and Nuxt.js, enhancing platform functionality and user experience.
- Built a reusable UI components library and integrated a Next.js wrapper for FormKit to streamline form handling and improve UI consistency.
- Implemented and scheduled cron jobs to automate key backend processes, improving operational efficiency.
- Collaborated with cross-functional teams to deliver features that supported personalized travel experiences for users.

National Data Management center (Ethiopian Public health institute)**Apr 2022 - Aug 2022****Data Engineer**

The Ethiopian Public Health Institute (EPHI) focuses on health research, data management, and public health initiatives. The National Data Management Center for Health (NDMC) within EPHI handles health data processing and supports evidence-based health policy through data analysis and visualization.

Accomplishments:

- Developed a Python-based data cleaning library for scientists with limited programming experience, simplifying interaction with raw tabular data.
- Created data visualizations to enhance the understanding and accessibility of public health data.
- Enabled seamless data preprocessing with a user-friendly interface for non-technical users.

EDUCATION**Addis Ababa University****Sept 2018 - Jul 2023**

- Gained foundational knowledge in software development, algorithms, data structures, and system design.
- Developed hands-on skills in programming, database management, and software engineering principles.
- Participated in various academic projects, building a strong understanding of the software development lifecycle and problem-solving techniques.

References:

- it.michael.belete@gmail.com - Bilby.ai
- mark.kovalenko@pinely.eu - Pinely.eu