CURRICULUM VITAE

Kwaku Osei KWAKYE

Kagawa, Sanuki-shi, Sangawamachi, Kanzaki 1684, Kanzaki Danchi E 102

| 070-9080-3509 | kwakuoseikwakye@gmail.com | GitHub | LinkedIn

SUMMARY

A software engineer with strong time management and collaborative skills gained through over 5 years of experience in modern software engineering in different local and international environments.

KEY SKILLS

- Full-Stack Developer (Back-end)
- **Domain Knowledge:** Web Database Management Systems, E-Commerce & Health Management Systems, SAAS
- **Proficient Stacks**: Javascript, Typescript, ReactJs, PHP, Laravel, Node.js, Express.js, Python, Tailwind CSS, Bootstrap, MySQL, Postgres, AWS, GitHub Actions & REST API.
- **Familiar Stacks:** VueJs, WebRTC, Firebase, Redis, Google Cloud Services, Docker, Jest, Linux administration, Redis, Go, Terraform, Kubernetes, DataDog, Inspector, Slack, Oracle
- Microservices Architecture
- Agile Development Methodologies
- Version Control Systems (Git)
- Test-Driven Development (TDD)
- Continuous Integration and Continuous Deployment (CI/CD)

PROFESSIONAL EXPERIENCE

Software Engineer, Kirirom Digital, Tokyo, Japan **(Jul 2024 – Present)**

Backend Development:
- Designed and developed RESTful APIs using Django to handle user interactions and process input data.
- Implemented secure user authentication and authorization mechanisms using Node.js/Express.js with AWS Cognito.
- Managed data storage and retrieval processes, ensuring efficient handling of user data and AI-generated content. **NodeJs(ExpressJs)**

Database Management:
- Architected and maintained the PostgreSQL database schema to store user inputs and AI models and generated video metadata.
- Optimized database queries and indexing to ensure high performance and scalability.
- Implemented data integrity and security measures, including regular backups and access controls.

AI Integration:
- Developed and integrated AI models for text-to-speech and video generation using TensorFlow, Tacotron2, and DeepFaceLab.
- Implemented the pipeline to convert user text input into AI-generated video content, including facial expression training and synchronization.
- Optimized AI model performance and accuracy through continuous training and fine-tuning. **Python/FastApi**

Feature Implementation:
- Enabled users to input text, which AI models then process to generate realistic video content with synchronized audio.
- Developed functionalities for previewing and downloading generated videos. **NextJs (TypeScript)**(https://www.michol.in)

Testing and Deployment:
- Conducted comprehensive testing of APIs, database interactions, and AI model outputs to ensure robustness and reliability.
- Set up continuous integration and deployment pipelines using GitHub Actions to automate testing and deployment processes.
- Monitored and debugged live system issues, ensuring minimal downtime and prompt resolution of issues. **AWS CLOUDWATCH**

Backend Developer, FunPeck, New York, USA **(Feb – Dec 2024)**

Database Design and Management:
- Designed and implemented the database schema using PostgreSQL.
- Created and optimized database queries for performance and scalability.
- Ensured data integrity and security through appropriate constraints, indexing, and backup strategies.

API Development:
- Developed RESTful APIs using Laravel 8 to support mobile and web applications.
- Implemented authentication and authorization mechanisms, including JWT for secure user access.
- Designed and documented API endpoints for various functionalities such as user registration, campaign creation, donation processing, and organization management.

Feature Implementation:
- Enabled users to create and manage organizations and campaigns, including setting up donation goals, tracking progress, and providing updates to donors.
- Developed functionalities for inviting existing users to manage organizations, facilitating collaborative management.
- Implemented account switching feature to allow users to switch between personal accounts and organization pages seamlessly, similar to Facebook page admin functionality.

Testing and Deployment:
- Set up continuous integration and deployment pipelines using GitHub Actions to automate the testing and deployment processes.

Collaboration and Communication:
- Worked closely with front-end developers to integrate APIs with user interfaces.

Full Stack Software Developer, PaySwitch (FinTech) *Accra, Ghana* **(Mar 2023 – July 2024)**

- Designed and implemented scalable microservice APIs and background workers using **PHP, Webman, Postgresql, and Redis** integrated with various services on **Google Cloud**. These APIs efficiently manage hundreds of requests daily.

- Developed WooCommerce payment plugin leveraging the company's payment gateway. https://github.com/kwakuoseikwakye/woocommerce thetellerpayment-gateway

- Engineered a versatile File Conversion Dashboard that transforms encrypted MasterCard and Visa files into accessible formats, serving the needs of two major banks using **Python and PHP**.

- Spearheaded the development of a comprehensive in-house Settlement Dashboard to manage and account for customer funds, enhancing transparency and trust using**, RUST, and NEXT JS (TypeScript)**.

- Collaborated with MTN Ghana to create a USSD-based Device Lending Platform, streamlining the borrowing process and improving user accessibility using **GO**.

Software Engineer, GITPlus, *Accra, Ghana* **(June 2019 – Feb 2023)**

- Led the design and development of enterprise-level web applications, leveraging cutting-edge technologies such as **PHP, Laravel, Bootstrap, Javascript, and React**.
- Provided strong leadership, guiding and mentoring a high-performing development team to successfully execute projects, fostering collaboration and professional growth.

- Implemented a robust Continuous Integration/Deployment pipeline, including pull requests, code reviews, load/stress testing, and unit/integration/e2e testing. This ensured a streamlined development process, resulting in reliable and stable software releases.
- Developed a company-wide **Authentication** and **File Upload service**, integral to all microservices, utilizing technologies such as **PHP, Laravel, and Livewire,** ensuring secure and efficient data management across the organization.
- Led the backend development efforts for a school management system (SAAS) implemented for several schools leveraging my expertise in **PHP, Laravel, Livewire, React, Mysql, and Javascript**. https://smartschoolonline.app.

Technical HelpDesk & Digital Support Analyst, Mobobi LLC, *Accra, Ghana* **(Mar 2018 – Feb 2019)**

- Managed employees' hardware and software procurement and setups
- Troubleshooted hardware, software, and network issues for customers
- Azure Active Directory/On-prem AD and Microsoft Exchange/ Exchange Online Administration etc.

EDUCATION

University Of Professional Studies-Accra, Ghana (Aug 2015 – July 2020)
Bachelor of Science, Information Management
Ghana Senior High School- Koforidua, Ghana (Sept 2011-June 2014)
General Arts (Elective Math, Economics….)

LANGUAGES

English (Native level), Japanese (Beginner), Akan (Mother tongue)

PROJECTS

- Developed and designed a sample bank application form using **HTML** and custom **CSS.** https://github.com/kwakuoseikwakye/bank_forms

- Developed a streamlined, lightweight framework using Express.js to enable rapid, efficient backend API creation with customizable options for database, ORM, and directory structure. The framework, available on GitHub, provides developers with an accessible foundation for Express-based projects, making it easier to get started and scale.https://github.com/kwakuoseikwakye/nanascript

- Currently working on a Shopify payment plugin using **NodeJs**