

CHHUNNENG CHREA

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FULL STACK PYTHON DEVELOPER

Passionate Full Stack Developer with over 5 years of experience building secure, scalable web applications across healthcare, e-commerce, education, and logistics domain for Japan, France, and Cambodia market. Proficient in SDLC with strong focus on the development, testing, and deployment phases. Specialized in ReactJS, Django, and PostgreSQL, AWS, CI/CD, and REST APIs in an Agile/Scrum environment.

- SOLID • CI/CD • Cloud Computing • Database Design & Optimization • Automated Testing
- Version Control & DevOps Workflow • Cross-Platform App Development • Software Development Lifecycle

Languages: Python, JavaScript, TypeScript

Web: HTML, CSS/SCSS, React, Vue.js, Tailwind CSS, Bootstrap, MaterialUI, jQuery, Hasura

Web Services: RESTful APIs, GraphQL, JSON, CORS, OAuth2, Basic Authentication

Web/App Servers: Nginx, Unicorn, Node.js, AWS EC2

Frameworks: Django, Django REST Framework, Angular, Next.js, Express.js, React Native, Uni-app, PyTest, Jest

Databases: PostgreSQL, MySQL, MongoDB, SQLite, Redis

Design Patterns: MVC, Observer, Decorator, Command, RESTful Design Principles, Component-Based Architecture

SDLC: Agile, Scrum, Kanban

Tools: Git, GitHub, GitLab, Chrome Inspector, Postman, Jenkins, GitHub Actions, Postman, Docker, AWS (EC2, S3, CloudFront, CloudWatch, Rekognition, Load balancers)

Platforms: Windows, MacOS, Ubuntu

Application/Software: GMO Payment Gateway, Bakong Payment Gateway

CAREER NOTE: Completed on-campus studies and currently taking distance education courses to complete a **Master's Degree in Computer Science** (Available for full-time, W-2 employment).

PROFESSIONAL EXPERIENCE

KIRIROM DIGITAL INC, Tokyo, Japan • 05/2023 – 01/2025

Senior Software Engineer

- Spearheaded the design and implementation of a hospital dashboard using React, TypeScript, and SCSS, improving healthcare provider efficiency by 30% through streamlined patient data management.
- Wrote and maintained unit and integration tests for core services using Python and Django, achieving 80% test coverage and reducing post-release bugs.
- Built and deployed a facial recognition system for a school module using Amazon Rekognition, Django, and Django Rest Framework, ensuring auto-detection of students in images and accurate delivery to parents.
- Maintained and optimized the backend advertising platform for an airline metaverse project using Graphene-Django, Kevel, and Redis, improving ad performance and dynamic advertising.
- Managed and advised on an AI-powered video generation project using ExpressJS, and AWS Cognito, achieving successful lip-sync functionality from images and earning a promotion to Lead Developer.
- Designed and maintained AWS cloud infrastructure with Nginx and Docker, ensuring high availability, fault tolerance, and cost efficiency across services.

Technologies Used: Python, Django, Django REST Framework, Graphene-Django, PostgreSQL, ExpressJS, React, JavaScript, TypeScript, AWS, GitHub Actions, Jenkins, Nginx, Git, SCSS, Docker, Redis, GraphQL, Kevel, CI/CD.

INFINITY INFORMATION & APPS DEV CO., LTD., Phnom Penh, Cambodia • 06/2022 – 03/2023

Senior Frontend Developer

- Developed a custom admin dashboard for a Home Service Project using ReactJS, Redux, and SCSS, improving operational efficiency.
- Built a Python-based web scraping tool to automate data collection for business intelligence, generating competitive insights and saving 80% of manual work weekly.
- Engineered a cross-platform live-streaming web app using Uni-app (Vue.js), expanding accessibility across devices and increasing user engagement by 40%.

- Optimized frontend performance for multiple web applications using lazy loading, code splitting, caching, and SCSS improvements, ensuring faster load times, responsive design, and consistent user experience.

Technologies Used: *React JS, Redux, JavaScript, Python, Uni-app, Vue.js, Redux, HTML, CSS, SCSS, Git.*

PEPPERMINT CAMBODIA, Phnom Penh, Cambodia • 04/2021 – 06/2022

Software Engineer(Client: Aleia, Ynergie)

- Built and maintained the frontend interface for a data visualization platform using React, TypeScript, and SCSS, enabling interactive dashboards and improving data accessibility for end users.
- Integrated Redux for state management in the visualization platform, ensuring seamless interaction, faster rendering, and smoother user experience.
- Established CI/CD pipelines using GitHub, GitLab, and Git, automating testing and deployment processes, which reduced release times by 50% and minimized manual errors.
- Developed reusable UI components with React and TypeScript, accelerating development speed and ensuring design consistency across the platform.
- Developed SEO-optimized landing pages for marketing campaigns using HTML, CSS, and JavaScript, increasing organic traffic by 70% and improving search ranking visibility.

Technologies Used: *React, Redux, TypeScript, SCSS, CI/CD, GitHub, Gitlab, Jest, HTML, CSS.*

REVORN, Tokyo, Japan (Remote) • 10/2020 – 04/2021

A group of odor experts who solve social and corporate problems through "DX with odor x AI".

Backend Developer

- Wrote clean, maintainable, and scalable backend code for enterprise systems using Python, Django, and Django REST Framework, improving system reliability and long-term maintainability.
- Collaborated with frontend developers to build seamless API integrations using Django REST Framework and GitLab, reducing integration issues and enhancing overall user experience.
- Wrote unit tests with Pytest, increasing test coverage and reducing post-release bugs by 30%.

Technologies Used: *Python, Django, Django REST Framework, PostgreSQL, Pytest, GitLab.*

VKIRIROM BUYING AGENT, Kampong Speu, Cambodia • 07/2019 – 10/2020

Full Stack Developer

- Created reusable UI components with React, SCSS, and Jinja2, ensuring consistent design patterns, responsiveness across devices, and faster frontend development cycles.
- Implemented an e-commerce platform with Django, PostgreSQL, and DRF, featuring authentication, product catalog, and secure payments, boosting sales and trust.

Technologies Used: *React, Django, Jinja2, HTML, CSS, JavaScript, PostgreSQL, Git, SCSS.*

ACHIEVEMENTS

CS Cup Cambodia: 1st Place in 2020 & 2021, the competition is to solve algorithmic problems.

EDUCATION

Master of Science in Computer Science

(In progress via distance education; expected completion 10/2027)

Maharishi International University, Fairfield, Iowa

Key Courses: *Web Application Programming, Modern Web Application, Algorithm, Enterprise Architecture*

Bachelor in Software Engineering

Kirirom Institute of Technology, Kompong Spue, Cambodia (11/2022)