

Mr. Vicheka Phor

Researcher and Software Developer

CONNECTED-IN, South Korea

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Researcher & Software Developer

ABOUT

I'm Vicheka PHOR, a versatile full-stack developer with a unique blend of software expertise and engineering background. I hold a Bachelor's in Electrical and Energy Engineering from ITC, Cambodia, complemented by two Master's degrees from France in Telecommunication and IT, and Embedded Systems. Currently, I'm leveraging this diverse knowledge as a Researcher and Software Developer at CONNECTED-IN in South Korea.

My core competencies lie in developing robust web, mobile, and desktop applications using a modern tech stack, including:

- 📱 Mobile: Flutter, Android (Kotlin, Jetpack Compose)
- 🌐 Web: Next.js (Kirimase, Create T3 App, shadcn/ui, Tailwind CSS, react-spring), React.js
- 🎨 Design: Figma
- ⚡ Backend: FastAPI, Express.js, Nest.js, PostgreSQL, MySQL, Supabase
- 🔑 Collaboration: Git, GitHub, Bitbucket, Jira, GitLab
- 🚀 DevOps: Docker, Docker Compose
- 🧠 AI: LLM (Ollama, Llama3, ChatGPT, Gemini), BERTopic, Tensorflow Hub Object Detection

I've successfully delivered diverse projects ranging including android apps for massage machines, hospital assist app and accident study databases, a company website using Next.js, and social review automation tools leveraging BERTopic. My experience extends to AI integration, particularly in object detection (TensorFlow), topic analysis (BERTopic), and working with Large Language Models (Ollama, ChatGPT, Gemini), Haystack and Hugging Face models.

As a dedicated professional with strong problem-solving skills, a versatile engineering background, and a passion for self-learning, I excel in delivering innovative solutions to complex challenges. With experience as a team lead and the ability to work autonomously, I am confident I can be a valuable asset to your company, providing efficient and cutting-edge results across various tech domains.

TECHNICAL SUMMARY

Languages	: Java Script, Kotlin, Java, Dart, Python, C#, C++, HTML5, CSS, PHP
Front-end	: Android (Kotlin, Jetpack Compose), Flutter, React Native, Next.js (Kirimase, Create T3 App, shadcn/ui, Tailwind CSS, react-spring), React.js, Electron, Cypress.io, Servlet, Figma
Back-end	: FastApi, Express.js, Node.js, Nest.js, Spring boot, Laravel, PostgreSQL, MySQL
Collaboration	: Git, GitHub, Bitbucket, Jira, GitLab
DevOps	: Docker, Docker Compose
AI/ML	: LLM (Ollama, Llama3, ChatGPT, Gemini), BERTopic, Tensorflow Hub Object Detection, Scikit-Learn (TFIDF), Numpy, Pandas, NetworkX, Word cloud, Keras

EDUCATION

- 2012 – 2014 : **Université Paul Sabatier – Toulouse, France**
Master's degree in Embedded Systems - Hardware and Software Engineering
- 2010 – 2011 : **ENSEEIH – Toulouse, France**
Master's degree in Telecommunication and IT
- 2005 – 2010 : **Institute of Technology of Cambodia – Phnom Penh, Cambodia**
Bachelor's degree in Electrical and Energy Engineering

HONORS

SUMITOMO Scholarship, 2009
Agence Universitaire de la Francophonie (AUF) Scholarship, 2010

ACADEMIC PROJECTS

RISC microprocessor design, December 2012 – February 2013
Renewable Energies Investment Calculation (Group of 3 members), October – December 2009
Electric Power Supply in Industry, April – June 2009

EXPERIENCE

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CONNECTED-IN, South Korea

March 2023 – Present

- Developed a Pathology Image Analysis Web App using Next.js, Supabase, and FastAPI with Celery
- DiaFootCare H-DF project: created landing page & flutter app survey feature
- Developed company home page using Next.js, ReactSpring: <https://connected-in.co.kr/>
- Asthma Control Android App (ACA) project: maintained, improved and added new features
- Integrated Facebook, Google, Kakao and Naver authentication, and Jitsi Meet in Flutter app
- Created Flutter Hospital Assist app
- Conducted research on LLM Knowledge Distillation
- Built a base template FastAPI app integrating AI models (BERTopic, Haystack, Hugging Face models) and using Poetry, Docker & Docker Compose
- Maintained Nuga Best and N7 massage machine app (Android Kotlin Jetpack)

Researcher & Software Developer

Yonsei University, South Korea

October 2020 – February 2023

- Project NugaBest (Massage machine tablet app):
 - Developed Android tablet (host mode controller app) and cross-platform reservation apps using React Native web view component.
- Project Korean In-Depth Accident Study Database (KIDAS):
 - Developed Android apps using Android Jetpack and Android compose, designed mockups using framer, and implemented fake API JWT server using Express.js and Json server.
- Project Flutter Base/Template app:
 - Constructed a Flutter base project adhering to MVVM architecture and integrating widely recommended or flutter favorite packages.

- Project CDM Recommendation System (CDM-RS):
 - Created base/boilerplate ReactJS web app for CDM-RS using React.js, RTK, Material-UI, react-redux, redux-saga, and react-quill, etc.
- Project Social Review Automation(SRA) and Social Network Analysis (SNA):
 - Developed desktop or project PDF annotation and topic modeling with BERTopic using Electron and React.js;
 - Created a Chrome extension app for manual data collection from the web;
 - Employed Cypress.io for web scraping;
 - Created node cli: pdf2png-node-cli, extract-pdf-text-by-coord-node-cli;
 - Used TensorFlow hub object detection for detecting sections of thesis PDF files;
 - Conducted social network analysis using Scikit-Learn TFIDF, NetworkX, Graphistry, topic modeling BERTopic, and word cloud.
- Others:
 - Conducted website security inspections using Fidlernet and SonarQube;
 - Implemented image matching and shape outline prediction using py-opencv and image-similarity-measures, etc.;
 - Improved uroflow desktop app using C# .Net Framework;
 - Created desktop app using Electron and React.js for ABR peak detector.

Software Developer

ALLWEB, Cambodia

December 2016 – September 2019

- Trained for 3 months from December 2018 to February 2019 on the TESSI DOCUBASE project, a JAVA web application (digital documents) at Tessi Documents Services in the Paris Area, France. Technologies used: Struts 1.2, Spring MVC, Servlet & JSP, Taglib.
- Led a team of 2 or 3 members as Team Leader.
- Developed Microsoft Excel VBA applications for the IFRS project.
- Contributed to an E-commerce Prestashop project, integrating features such as module marketplace and mango payment, and managing events.
- Worked on React Native project implementing features like Push Notification, QR code scanning, and RealmJS integration.
- Utilized SCRUM methodology for project management, utilizing tools like Bitbucket, JIRA, and Confluence.

IT Lecturer (Full time)

Kirirom Institute of Technology – Kompong Speu, Cambodia

November 2015 – October 2016

- Supervised internships for drone programming project, projection mapping project.
- Taught courses on Android, servlet & JSP, website development (HTML, CSS, JS), DBMS, MySQL.

LANGUAGES

English	: Advanced
French	: Basic
Korean	: Basic

HOBBIES

Mobile game, football, badminton, music