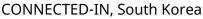
#### Mr. Vicheka Phor

Researcher and Software Developer



&Tel.: 010 21 59 64 57







## **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:

- I Mobile: Flutter, Android (Kotlin, Jetpack Compose)

- Backend: FastAPI, Nest.js
- DevOps: Docker, Docker Compose
- Q AI: LLM (Olama, 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, I combine strong problem-solving skills with excellent organizational abilities and cross-cultural adaptability. I thrive in dynamic environments, effectively managing multiple tasks and collaborating across diverse teams. My combination of software development expertise and engineering background allows me to tackle complex technical challenges with a practical, innovative approach. I'm adept at applying my diverse skill set to create efficient, cutting-edge solutions across various domains in the tech industry.

## **★** 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, React.js, Electron,

Cypress.io, Servlet, Figma

Back-end : FastApi, Express.js, Node.js, Nest.js, Spring boot, Laravel

Database : PostgreSQL, MySQL

**DevOps** : Docker, Docker Compose

AI/ML : LLM (Olama, 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 : ENSEEIHT – 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

## THONORS

SUMITOMO Scholarship, 2009

Agence Universitaire de la Francophonie (AUF) Scholarship, 2010

# **邑 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**

## Researcher & Software Developer

CONNECTED-IN, South Korea

March 2023 - Present

- Developed company home page using Next.js, ReactSpring: <a href="https://dev-home.connected-in.co.kr/">https://dev-home.connected-in.co.kr/</a>
- 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-opency and imagesimilarity-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.

# Control Languages

English : Advanced French : Basic Korean : Basic

### M HOBBIES

Mobile game, football, badminton, music