Sothyro Meas

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WORK EXPERIENCE

🏢 *Canadia Bank*

Application Security Analyst (Pentester)

[4 Jun 2024 – Current]

- Perform penetration testing on web and mobile applications & APIs (**Kali Linux tools, Burp Suite, Frida**).
- Conduct vulnerability assessments & policy compliance scans (**Tenable Nessus**)
- Perform static and dynamic source code reviews (**SonarQube, JADX**)
- Lead phishing simulations to raise employee security awareness (**Gophish**).

🏢 *Ministry of Education, Youth and Sport*

Freelance Software Developer

[Oct 2023 – Dec 2024]

- **Akhara –** Mobile App to Enhance Reading Skills among Cambodian High School Students
    - Implemented a pronunciation assessment feature using a **Hugging Face pre-trained** model.
    - Developed the frontend (**React Native** & **Tailwind**) and backend (**Flask, Appwrite,** and **PostgreSQL**).
    - Deployed to the Play Store and App Store under the name **Akhara**, reaching **over 2,000 downloads.**

- **Plagiarism Detection Tool –** Web Application for Detecting Plagiarized Khmer Content
    - Built the frontend (**React** & **Tailwind**) and backend (**Python, Flask,** and **Redis**).
    - Integrated **Google Cloud Vision** for PDF text extraction and **Elasticsearch** for similarity search.
    - Applied **NLP and information extraction techniques**, including TF-IDF and BERT.
    - Website: plagiarism-checker.duraseksa.gov.kh (Required Login Credentials, Demonstration: [Link](#))

🏢 *Kakvei Typing Tool*

Technical Project Lead

[Sep 2022 – Jan 2024]

- Received **$23,000 in funding** to build a web and Chrome extension that enhances digital writing accessibility for Khmer writers by providing Khmer transliteration features, addressing challenges in the current Khmer typing system.
- Crawled Khmer text from public web sources and applied data cleaning, normalization, and data mapping.
- Website: https://kakvei.tech/en/about-us/, *Funding reference listed in the Honors and Awards section.*

UNDERGRADUATE RESEARCH EXPERIENCE

[21 Aug 2023 – 26 Apr 2024]

A Comparative Study of Plagiarism Detection Methods for OCR-Extracted Khmer Texts

- Project funded by the Secretary of State of the Ministry of Education, Youth and Sport in Cambodia
- Conducted OCR-based text extraction from PDF documents, followed by data cleaning and normalization of Khmer text.
- Evaluated different methods (TF-IDF, BERT, and Elasticsearch) and identified the most efficient approach for large-scale text comparison.
- Website: https://plagiarism-checker.duraseksa.gov.kh/ and full thesis report: [Link](#)

LANGUAGE SKILLS

Mother tongue(s): Khmer

Other language(s): English (IELTS 7.0) | German (Goethe Zertifikat B1)

EDUCATION AND TRAINING

Bachelor of Science in Information and Communication Technology

American University of Phnom Penh [11 Jan 2021 – 16 Sep 2024]

Address: Phnom Penh, Cambodia, | **Final grade:** 3.78 / 4 Honors: Magna Cum Laude | **Thesis:** A Comparative Study of Plagiarism Detection Methods for OCR-Extracted Khmer Texts

Elective Courses: *ICT 321 Cybersecurity, ICT 405 Ethical Hacking, ICT 406 Advanced Ethical Hacking, ITM 360 Machine Learning, ITM 390 Artificial Intelligence, ITM 370 Data Analytics, ITM 380 Cloud Computing*

TECHNICAL ACTIVITIES

[Mar 2022 – Sep 2022]
Cambodian Team Mentor, World Robotic Olympiad 2022

- Mentored the Cambodian team for the World Robot Olympiad 2022 final round in Dortmund, Germany.
- Built a remote-controlled boat to collect trash from rivers, addressing environmental challenges.
- Worked with Raspberry Pi, IoT components, and OpenCV.
- Reference: Link

[Mar 2023 – Jul 2023]
Technical Team Lead, Google Digital Literacy Funding Project

- Awarded **$3,000** in funding from **Google.org** to lead a cybersecurity campaign in Cambodia called **Puthi**.
- Reached thousands of Cambodian youth through university campaigns promoting safe and responsible digital use.
- Developed a user registration webpage, and deliver cybercrime awareness content in Khmer language.
- Campaign social media: Link, Website: https://puthi.info/english

HONOURS AND AWARDS

[16 Apr 2025] German Academic Exchange Service (DAAD)
DAAD Master Degree Program STEM Scholarship Recipient I am honored to have been selected as a 2025 DAAD Scholarship awardee, representing Cambodia. This prestigious scholarship will support my studies, allowing me to pursue advanced research and deepen my knowledge at a renowned German institution.

[2023] Innovative Project Award – Kakvei Typing Tool
Total Funding and Awards: $23,000 Developed a digital writing tool that converts Khmer Romanized text into Khmer script, enhancing digital typing efficiency for Khmer writers. Received multiple awards for the project's innovation and impact:
- **Smart Start Young Innovator Winner from Axiata** (Nov 2022) –1st place winner with 10,000$ award Link
- **National Incubation Center of Cambodia** (Oct 2023) – for project development with 10,000$ funding Link
- **Business Model Competition 2023** (Dec 2023) – for innovative project proposal with 3,000$ award Link

[Aug 2023] Huawei
Moonshot Award for best Entrepreneur project in Asia Pacific Received the Moonshot award from American investor Jim Rogers and Huawei company for best tech business development, competing among 16 countries in the Asia-Pacific region. Link