Sothyro Meas

🏠 **Phone number:** (+855) 12628461   ✉ **Email address:** meassothyro3@gmail.com

in **LinkedIn:** Sothyro Meas

🌐 **Website:** https://meas-sothyro.github.io/

📍 **Home:** #89D, Street 202, 120406 Phnom Penh (Cambodia)

WORK EXPERIENCE

🏛 *Canadia Bank — Phnom Penh, Cambodia*

Application Security Analyst (Pentest)

[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 cybersecurity awareness (**Gophish**).

🏛 *Ministry of Education, Youth and Sport — Phnom Penh, Cambodia*

Freelance Software Developer

[Oct 2023 – Jun 2024]

- **Akhara –** Khmer E-book, Audiobook, and Pronunciation Assessment Mobile App for Cambodian Students
  - Implemented a pronunciation assessment feature using a **Hugging Face pre-trained** model.
  - Developed frontend (**React Native** and **Tailwind**) and backend (**Flask, Python,** and **Appwrite**).
  - Deployed to the Play Store and App Store under the name **Akhara**, reaching **over 5,000 downloads.**

- **Plagiarism Detection Tool –** Web Application for Detecting Plagiarized Khmer Content
  - Built frontend (**React** and **Tailwind**) and backend (**Python, Flask,** and **Redis**).
  - Integrated **Google Cloud Vision** for Khmer 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 (requires login credentials; demonstration via the: Link)

🏛 *Kakvei — Phnom Penh, Cambodia*

Technical Project Lead

[Sep 2022 – Jan 2024]

- Received **$23,000** in funding to develop a web application and Chrome extension 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/, *Reference for funding listed in the Honors and Awards section*.

UNDERGRADUATE RESEARCH EXPERIENCE

[21 Aug 2023 – 26 Apr 2024]

Plagiarism Detection in OCR-Extracted Khmer Text: Method Comparison and Web Application Implementation

- Project funded by the Secretary of State of the Ministry of Education, Youth and Sport in Cambodia
- Extracted text from Khmer PDFs using Google Cloud Vision OCR, followed by data cleaning and normalization.
- Evaluated different methods (TF-IDF, BERT, and Elasticsearch) and identified the most efficient approach for large-scale Khmer text comparison.
- Full thesis report: Link

LANGUAGE SKILLS

Mother tongue(s): Khmer

Other language(s): English (IELTS 7.0)

EDUCATION AND TRAINING

Bachelor of Science in Information and Communications Technology
American University of Phnom Penh [11 Jan 2021 – 16 Sep 2024]

Address: Phnom Penh, Cambodia, | **Final grade:** 3.78 / 4.00 Honors: Magna Cum Laude | **Thesis:** Plagiarism Detection in OCR-Extracted Khmer Text: Method Comparison and Web Application Implementation

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 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, named **Puthi**.
- Reached thousands of Cambodian youth through university campaigns promoting safe digital practices.
- Developed a user registration webpage, and delivered cybercrime awareness content in Khmer language.
- Campaign social media: Link, Website: https://puthi.info/english

[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, tackling environmental challenges.
- Worked with Raspberry Pi, IoT components, and OpenCV.
- Reference: Link

HONOURS AND AWARDS

[2023] Innovative Project Award – Kakvei
23,000$ Total Funding and Awards: Developed a digital writing tool that converts Khmer Romanized text to 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 a 10,000$ award Link
- **National Incubation Center of Cambodia** (Oct 2023) – for project development with a 10,000$ funding Link
- **Business Model Competition 2023** (Dec 2023) – for innovative project proposal with a 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 for the best tech business proposal development, competing among 16 countries in the Asia-Pacific region. Link