

Kosal Chansothay

+855 95 918 206 | kosalchansothay@gmail.com |
st 1980 | Phnom Penh Thmey | Sen Sok | Phnom Penh |
<https://www.linkedin.com/in/kosal-chansothay-985b52297> |
<https://github.com/KosalChansothay>
Personal Website: <https://kosalchansothay.github.io/me/>



EDUCATION

Institute Of Technology of Cambodia, Department of Applied Mathematics and Statistics, Data Science,
GPA: 4.0 / 4.0 Oct 2022–Present

Relevant Coursework: Probabilistic Graphical Models, Economic for Engineers, Large-Scale Distributed Systems (Big Data), Data Visualization, Database Design and Admin

Course Completed: Google Data Analytics Professional Certificate | Google Advanced Data Analytics Professional Certificate | Meta Data Analyst Professional Certificate | Data Science camp by Handong Global University | Industry Professional Credentials Track (STIC) | Supervised Machine Learning: Regression and Classification

TECHNICAL SKILLS

Programming Languages: Python, R, SQL, HTML, CSS

Frameworks & Tools: NumPy, Pandas, Matplotlib, Seaborn, Plotly, Power BI, Excel, Spreadsheet

Machine Learning Frameworks: Scikit-learn, Pytorch

PROJECTS

Deep Learning Project: Khmer Sentiment Analysis: | Python, Transformer | Slide Deck 20 Jan. 2025

- Break down the concept of the attention mechanism and its properties, explaining step by step the backbone of the Generative Pre-trained Transformer.
- Work on a literature review regarding the topic of Transformer architecture, broadening the knowledge around the topic
- Instantiate the pre-trained model for fine-tuning with our own dataset, getting to know how well the model works with Khmer script.

Caffeine Consumption Effects on Academic Performance: | R Programming | Notebook 27 Jan. 2025

- Conduct research on how coffee consumption affects the performance of university students before the examination versus non-consumer students.
- Use exploratory data analysis to investigate the data prior to model specification and diagnostics.
- Interpret the results of the research and provide recommendations based on empirical data.

Data Analytics Project: Customer Churn Prediction | Pandas, Matplotlib, Seaborn, Scikit-Learn | Notebook

- Perform data preprocessing to meet the model requirement
- Handle both numerical and categorical data by scaling (numerical) and labeling/converting (categorical)
- Logistic Regression is implemented as a main model for this classification task
- Developed a machine learning model to predict customer churn using classification techniques.
- Evaluated model performance with metrics such as accuracy, precision, recall, F1 score, and confusion matrix.
- Delivered actionable insights to improve customer retention strategies.

Object Detection and Localization: YOLOv8: Slide Deck | Notebook 25 Jan. 2025

- Initialize the pre-trained model for Training and Evaluation
- Conduct literature review for the background of its Mathematical formula
- Interpret results from the Training/Inference and Demo

WORK EXPERIENCE

Internship at the Ministry of Post and Telecommunications | CADT

Data Annotation | Khmer Automatic Speech Recognition (ASR) *August 15, 2024-September 30, 2024*

- Renaming video files according to the scripts provided to ensure compatibility with the ASR system.
- Using the ffmpeg framework in Python to deal with the video format and the outputs stored in separate folders.
- Segmenting the text into single words to meet the format of model training of Khmer ASR.
- Test the performance of the KhmerASR mobile application with new data (different context).
- Evaluating the performance of the ASR model by comparing its outputs (hypotheses) with the ground truth (references).

LANGUAGE

- Khmer: Native speaker
- English: Intermediate

SOFT SKILL

Time Management, Communication, Teamwork, Negotiation, Adaptability, Presentation, Critical thinking, Resilience

LEADERSHIP

Crossroads Church of Cambodia

Discipline Leader in the student dormitory: Achievement 1: Certificate | Achievement 2: Certificate

REFERENCES

Mr. Nhim Malai: Lecturer at the Institute of Technology of Cambodia

Email: nhim.nhim@itc.edu.kh

Mr. Toch Sopheak: Lecturer at the Institute of Technology of Cambodia

Email: touch.sopheak@itc.edu.kh

Dr. Neang Pheak: Lecturer at the Institute of Technology of Cambodia

Email: neang.pheak@itc.edu.kh

Mr. Moeun Rathana: Senior Pastor of the Crossroad Church of Cambodia

Email: pillars.rathana@gmail.com