

Nguyen Ba Thanh Son

 Nong Lam University - HCMC, Vietnam

 (+84) 933.828.417  2518149005@sdh.hcmuaf.edu.vn

 <https://github.com/wosonday>  <https://wosonday.id.vn/>

Introduction

Son graduated with a degree in Environmental Resource Management and is currently a full-time M.Sc. by Research student at Nong Lam University - HCMC, Vietnam. His research focuses on hydrology and climate change, with an emphasis on applying both physically-based models and artificial intelligence to address critical global challenges related to water resources and food security.

Education

M.Sc. in Environmental Resources Management (08 / 2025 - Present)

 Nong Lam University - HCMC, Viet Nam

- Cumulative GPA: **8.5/10**

B.E. in Environmental Resources Management (2020 - 2024)

Nong Lam University - HCMC, Viet Nam

- Cumulative GPA: **3.26/4.00**
- Degree classification: **Very good**
- Thesis title: **Assessment of solid waste collection and design of a new collection route in An Binh Ward, Di An City, Binh Duong Province**

Experience

M.Sc. by Research (04/2025 - Present)

 MATHY-NLU, Nong Lam University-HCMC

- Build a SWAT model to generalize parameters for similar regions, focusing on ungauged basins in Vietnam.
- Analyze river flow and hydrological extremes under difference climate change scenarios.
- Multi-model testing of machine learning algorithms for streamflow data

Teaching assistant (04/2025 - Present)

Data Mining Course, Nong Lam University-HCMC

- Preparing data for practical data processing
- Editing practice content
- Guide to processing real-world hydrological data

Publication

2026

JOURNAL ARTICLES

[JOURNAL-ARTICLES] [IN PREPARATION] ASSESSMENT OF HYDROLOGICAL IMPACTS OF THE G6SULFUR CLIMATE INTERVENTION SCENARIO ON RIVER BASINS ACROSS DIFFERENT CLIMATIC ZONES IN VIETNAM

Nguyen Ba Thanh Son*, L.H Tu and D.X Hong

Selecting a Journal

JOURNAL ARTICLES

[JOURNAL-ARTICLES] [SUBMISSION] TOWARD A VIETNAM-WIDE HYDROLOGIC MODEL FOR SURFACE WATER RESOURCES ASSESSMENT: REGIONALIZING SWAT MODEL PARAMETERS

L.H Tu*, **Nguyen Ba Thanh Son**, D.X Hong,...

Hydrological Sciences Journal (HSJ)

JOURNAL ARTICLES

[JOURNAL-ARTICLES] [SUBMISSION] ASSESSING AGRICULTURAL DROUGHT PROPAGATION IN THE BA RIVER BASIN UNDER CLIMATE CHANGE AND SOLAR GEOENGINEERING SCENARIOS USING SWAT-MODEL

Nguyen Ba Thanh Son*, L.H Tu and D.X Hong

The Journal of Agriculture and Development (JAD)

JOURNAL ARTICLES

[Journal-Articles] [Revision] QUANTIFYING THE UNCERTAINTY OF CLIMATE CHANGE IMPACTS ON HYDROLOGICAL REGIME OF THE LO RIVER BASIN, VIETNAM

Nguyen Ba Thanh Son*, N.D.X. Hien, L.H Tu, N.T.T Ha and D.X Hong

The GIS-IDEAS Journal (TGIJ) ([here](#))

JOURNAL ARTICLES

[Journal-Articles] [Submission] How will Stratospheric Aerosol Injection (SAI) affect the hydrological regime and extreme weather conditions in the Ba River Basin, Vietnam?

Son, N. B. T.*, L.H Tu, NQ Binh, N.D.X Hien and D.X Hong

DISCOVER GEOSCIENCE (SPRINGER)

CONFERENCE

[Proceeding] [Improving SWAT Model Accuracy Using XGBoost via Residual Learning: A Case Study in the Upper Ba River Basin, Central Vietnam] Nâng cao độ chính xác mô hình SWAT bằng XGBoost theo phương pháp học sai số dư: nghiên cứu điển hình tại thượng nguồn lưu vực sông Ba, miền Trung Việt Nam

Son, N. B. T.*, L.H Tu and D.X Hong

Viet Nam NATIONAL-GIS 2026

Publication

2025

CONFERENCE

[Poster-presentation] Assessing the Impacts of Climate Changes on Hydrological Regime at Ba River Basin Using CMIP6 Data

Nguyen Ba Thanh Son*, L.H Tu and D.X Hong

iVCEES-2025 Conference ([here](#))

CONFERENCE

[Proceeding] [Assessing of different objective functions used in SWAT model calibration: a case study in the An Lao River basin, Gia Lai province.] **Phân tích các hàm mục tiêu khác nhau được sử dụng trong hiệu chỉnh mô hình SWAT: trường hợp nghiên cứu tại lưu vực sông An Lão tỉnh Gia Lai**

Nguyen Ba Thanh Son, L.H Tu* and D.X Hong

Viet Nam NATIONAL-GIS 2025 ([here](#))

Technical Skill

Programming: Python, R

GIS: QGIS, ArcGIS, Rasterio, GDAL

Data Science: Pandas, Numpy, Scikit-learn

Hydrological Modeling: SWAT-model

Reference

Dr. Hong Xuan Do

- Nong Lam University – Ho Chi Minh City, Vietnam
- Email: doxuanhong@hcmuaf.edu.vn

Dr. Le Hoang Tu

- Nong Lam University – Ho Chi Minh City, Vietnam
- Email: tu.lehoang@hcmuaf.edu.vn