

HOANG NGUYEN

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Highlights of Qualifications

- A solid background in quantitative analysis by train.
 - Experienced in developing full-stack applications (i.e., mobile and web), computer vision models.
 - My vision for future development is to dive deeper into backend and database engineering.
 - About a decade of professional experience in fisheries management
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Highlights of Projects

MediSync AI

With this project, my team won the DO.IT hackathon best-overall prize.

Our solution enables medical professionals with no technical background to easily interact with large medical datasets and help them analyze and visualize patient historical records through natural language processing and vector databases.

- MongoDB, Express JS, React JS, Langchain JS, Open AI
- Demonstration video www.youtube.com/watch?v=0E2VGkUw9dQ

Bird classification

A full stack IOS app allows users to select a bird image from their phones. The app can identify bird species and tell fun facts; users can save all the information in the database for future use.

- React Native, Flask, Firebase, and
 - TensorFlow, Ultralytics for model analysis and development
- GitHub link github.com/LeoUtas/bird_classification_react-native.git
- Demonstration video [Bird Classification App \(youtube.com\)](https://www.youtube.com/watch?v=0E2VGkUw9dQ)

A 2-layer Neural Network from Scratch

An experiment of a 2-layer neural network (NN) using NumPy, providing a straightforward understanding of the mathematics behind NNs

- GitHub link github.com/LeoUtas/2-layer_neural_network.git
- My development portfolio: leoutas.github.io/react_portfolio/
- My GitHub link: github.com/LeoUtas?tab=repositories

Knowledge

- Machine learning
- Full stack development
- Data visualization, Quantitative analysis
- Cloud, Database
- Commonly used 3rd party tools

Technical tools

- Python, R
- Python, Express JS, React JS, React Native (Typescript), HTML, CSS (tailwind), Git, Docker
- MS Excel, Python, R, React + D3JS
- AWS EC2, S3, Glue, RDS, Supabase, Firebase, MongoDB, Qdrant
- OpenAI, Langchain, Ultralytics, TensorFlow, Shadcn/ui

Education

Graduate student in Quantitative fisheries modelling

➡ Aug. 2024

Marine Institute of Memorial University of Newfoundland, Canada

Master of Applied Science in Marine Environment with Honors

Jun. 2016 – Dec. 2018

University of Tasmania, Australia

Bachelor of Biotechnology

Sep. 2002 – Jan. 2007

Nha Trang University, Vietnam

Development experience

- Developing full-stack applications, machine learning, computer vision, data analytics and visualization projects, 2022 – present.
- Programming statistical models for fish stock assessment at Fisheries and Marine Institute of Memorial University of Newfoundland, 2020 - present

Previous professional experience

- Principal Researcher at Vietnam Sea-culture Association, 2019-2020
 - Academic Tutor at the University of Tasmania, 2017-2018
 - Fisheries Official at Directorate of Fisheries of Vietnam, 2012-2016
 - Secretariat at Southeast Asian Fisheries Development Center, 2014-2015
 - Technical Staff at Institute of Vietnam Fisheries Economics and Planning, 2010-2012
 - Junior Researcher at Institute of Marine Environment and Resources, 2008-2010
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