HOANG **NGUYEN**

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Highlights of Qualifications

- Experienced in developing full-stack applications (i.e., mobile and web) and deployment
- Experienced in applied artificial intelligence development
- A solid background in quantitative analysis by train
- About a decade of professional experience in management and research
- Proven record of loving challenges, quick learner and a lifelong learner spirit

Relevant Experience

Research assistant

Fisheries and Marine Institute of Memorial University of Newfoundland

2020

2024

Modeling the population dynamics of redfish in the 3LN divisions under the Northwest Atlantic
Fisheries Organization (using Global Fishing Watch API to retrieve commercial fishing effort data),
resulting in in a talk at 2024 annual meeting of Statistical Society of Canada and a paper

Highlights of my development experience

MediSync Al

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

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 Al
- App demonstration video <u>www.youtube.com/watch?v=0E2VGkUw9dQ</u>

Bird classification

2022

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.

present

- · 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)

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

Knowledge

- Full stack development
- Data visualization, Quantitative analysis
- · Cloud, Database
- Al engineering

Technical tools

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

Education

Graduate student in Quantitative fisheries modelling

Marine Institute of Memorial University of Newfoundland, Canada

Aug. 2024

Master of Applied Science in Marine Environment with Honors

University of Tasmania, Australia

2016-2018

Bachelor of Biotechnology

Nha Trang University, Vietnam

2002-2007

Other professional experience

- Principal Researcher at Vietnam Sea-culture Association, 2019
- 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
- Researcher in the field of marine environment, fisheries management, 2008-2012

Honors & Awards

- Best-Overall Prize at the DO.IT hackathon, May 2024
- Australia Awards Scholarships by The Department of Foreign Affairs and Trade of Australia, Jul 2015
- Certificate of Appreciation for Work and Dedication by Southeast Asian Fisheries Development Center, Dec 2014