### HOANG **NGUYEN**

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# **Highlights of Qualifications**

- A builder passionate about building and improving full-stack applications.
- A problem solver with strong analytical and problem-solving skills
- A technical professional with strong interpersonal, organizational and presentation skills

# **Highlights of Projects**

#### MediSync Al

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 Al
- ➤ Demonstration video https://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 <a href="https://github.com/LeoUtas/bird">https://github.com/LeoUtas/bird</a> classification react-native.git

  Demonstration video Bird Classification IOS 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 https://github.com/LeoUtas/2-layer neural network.git
- ➤ My development portfolio: https://leoutas.github.io/react\_portfolio/
- ➤ My GitHub link: https://github.com/LeoUtas?tab=repositories

## **Knowledge**

- Machine learning
- Full stack development
- Data visualization, Quantitative analysis
- Cloud, Database
- Version control
- Linux

## **Technical tools**

- Python, R
- Python, Express JS, React JS, React Native (Typescript), HTML, CSS (tailwind)
- MS Excel, Python, R, D3JS
- AWS EC2, S3, Glue, RDS, Supabase, Firebase, MongoDB, Qdrant
- GitHub Actions, Git, Docker
- AWS EC2, WSL

## **Education**

**Graduate student in Quantitative fisheries modelling** 

Marine Institute of Memorial University of Newfoundland, Canada

**Master of Applied Science in Marine Environment with Honors** 

University of Tasmania, Australia

**Bachelor of Biotechnology** 

Nha Trang University, Vietnam

→ Dec. 2024

Jun. 2016 – Dec. 2018

Sep. 2002 – Jan. 2007

# **Development experience**

- Developing full-stack applications, machine learning, computer vision, data analytics and visualization projects, 2022 present.
- Programming for fisheries models 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