## HOANG **NGUYEN**

St. John's NL · (709)-219-1686 hnguyenthe@mun.ca| www.linkedin.com/in/hoangng84

# **Highlights of Qualifications**

A professional with a decade of experience in quantitative research and project management transitioning to software development with a passion for building applied artificial intelligence solutions

Skills		
SKIIIS		

#### **Technical tools**

- Full stack development
- Python (Flask, Fast API), Typescript (Express JS, React JS, React Native), HTML, CSS (tailwind), Git, GitHub, Docker
- Data Analytics
- MS Excel, Python (NumPy, Pandas, Scikit-learn, PySpark), R, PostgreSQL, Hadoop
- Cloud, Database
- AWS EC2, AWS S3, Supabase, Firebase, MongoDB, Qdrant
- Artificial intelligence
- OpenAl, Langchain, LlamaIndex, TensorFlow, Ultralytics

# **Experience**

### Research assistant (Dec 2020 - Present)

Fisheries and Marine Institute of Memorial University of Newfoundland

- Modelled the population dynamics of redfish in the 3LN divisions under the Northwest Atlantic Fisheries
- Leveraged Global Fishing Watch API to retrieve commercial fishing effort data

#### Principal Researcher (Jan 2019 – Dec 2019)

Vietnam Sea-culture Association

- Conducted studies on environmental issues associated with marine farming operations in Vietnam
- Developed inter-national connections to promote sustainable aquaculture in Vietnam

#### Academic Tutor (Jan 2017 – Dec 2017)

University of Tasmania

Provided one-on-one tutoring for indigenous students at University of Tasmania

### Highlights of Development Experience (Jan 2022 – Present)

### MediSync AI (hackathon best-overall prize project)

- Enables medical professionals to easily analyze and visualize patient historical records using retrieval augmented generation techniques
- TypeScript (Express JS, React JS), Langchain JS, MongoDB, Open AI
- Demonstration video www.youtube.com/watch?v=0E2VGkUw9dQ

#### **Bird classification** (available on AppStore)

- Classifies bird species using images and tells fun facts about the bird using a computer vision model
- JavaScript (React Native), Python (Flask), Firebase, Open AI
- TensorFlow, Ultralytics for model analysis and development
- Demonstration video: <u>youtu.be/wF7Je4-l1L4</u>

### A 2-layer Neural Network from Scratch

- Provides a straightforward understanding of the mathematics behind neural network using NumPy
- GitHub link github.com/LeoUtas/2-layer\_neural\_network.git

More projects in my portfolio: leoutas.github.io/react portfolio

## **Education**

**Graduate student in Quantitative fisheries modelling** (Jan 2020 - Dec 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 - Sep2007)

Nha Trang University, Vietnam

# Earlier professional experience

- 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