

# Hongdi LAI

Portfolio: [hongdi.web.app](http://hongdi.web.app) | E-mail: [hongdilai0105@gmail.com](mailto:hongdilai0105@gmail.com) | GitHub: [github.com/Hongdi-LAI](https://github.com/Hongdi-LAI)

## Education

### Université Côte d'Azur

Nice, France

**Degree:** Master of Science in Hydro-informatics and Water Management (Full English Course)

Graduated on 31/08/2020

**Subjects:** Machine Learning, Numerical Modelling, Risk & Sustainable Management, Web Design

GPA: Top 10%

### Beijing Institute of Technology

Beijing, China

**Degree:** Bachelor of Science in Electrical Engineering and Automation (Full English Course)

Graduated on 26/06/2018

**Subjects:** Control Theory, Algorithm and Data Structure Optimization, Object-Oriented Programming

GPA: 3.0/4.0

## Work Experience

### DHI Water & Environment (S) Pte Ltd

Singapore, Singapore

**Position:** Hydro-informatic Specialist (Data Science/Website Design)

September 2020 - Now

**Responsibilities:** Engaging in Machine Learning Projects while coordinating and bridging the knowledge between the modelling team and the software team, and using React as Front-end design framework

### City Government of Nice/ Polytech Nice

Nice, France

**Position:** Software Developer and Product Manager

March 2020 to August 2020

**Responsibilities:** Developing and designing the whole functionalities of an augmented reality mobile app to visualise city-wide flood data for the use of 1-million Nice urban area inhabitants and water experts

### Willis Re/ National University of Singapore

Singapore, Singapore

**Position:** Intern Catastrophe Data Analyst

June 2019 to September 2019

**Responsibilities:** Optimizing Python-based catastrophe model on flood maps of Jakarta, analysing existing data collections, achieving reinsurance evaluation, and acquiring loss functions

### Bionic-Robot Research Team of Beijing Institute of Technology

Beijing, China

**Position:** Junior Robotics Engineer

March 2018 to June 2018

**Responsibilities:** Optimizing and testing the mechanical and dynamical model of amphibious robot with AutoCAD and C++ based on BPNN deep-learning algorithm, tracing ability testing using Fuzzy PID

### BIT Laboratory of Intelligent Information Processing and Control

Beijing, China

**Position:** Intern Software Developer

April 2016 to June 2017

**Responsibilities:** Building distributed system in C++ using Socket and UI design with MFC Framework for the University-wide remote experiments initiative

## Skills

### • Proficient in:

- JavaScript, CSS3(BEM), HTML5, React Framework (React Hooks + State Management)
- Node.js (RESTful API), Express.js (Server), MongoDB (Database), and Firebase (Cloud Platform and Hosting)
- Responsive Web Design, Well-organised and Read-able Code Writing
- Git and GitHub for Version Control and Technical Documentation
- Python (Data Analysis and Objective Programming), C# (Objective), C++ (Objective), Java
- SQL for Data Configuration and Tableau for Data Visualisation

### • Basic in:

- R, Hadoop, and Spark Apache
- Typescript, Vue.js, Angular.js
- React Native

### • Language Proficiency:

- English: Native/ C2
- Mandarin & Cantonese: Native
- Japanese: N4
- German: C1/B2
- French: A2