# Xiaohua Cai, Web Developer

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# **SKILLS**

# Languages & Frameworks

HTML/CSS/SASS, JavaScript, Python Flask, Java, Node.js, Express, React, jQuery, Bootstrap, Visual Basic

Systems & Database: Git/Github, MongoDB, PostgreSQL, MySQL, Heroku, Netlify

#### **EDUCATION**

# Web Development NanoDegree

Dec.2020-Mar.2021

Udacity

HTML|CSS|JavaScript, Node.js, Express, Webpack build tool

Master of Science Sep.2017-Dec.2018

University of Alberta, Edmonton AB, Canada GPA3.7/4.0

Bachelor of Science Sep.2013-Jun.2017

Fujian Agriculture and Forestry University, China GPA 3.7/4.0

# **CODING PROJECTS**

Full Stack Chat App | React | Node.js | Express | Socket.io | Deployed on Netlify, Heroku Apr.2021

- Created a real-time chat application using React on the front end, with Node.js, Express, Socket.io on the back end.
- Use client-side and serve-side WebSockets to create connections and broadcast message

Live Page: https://608e25d60f7378ad3aba9eff--elated-jennings-f62dcf.netlify.app/

Repository: https://github.com/xiaohua2003/chat-app

Full Stack Library App | Node.js | Express | MongoDB | EJS | Deployed on Heroku

May 2021

- Launched a Library application based on Model-View-Controller design pattern, which allows user to add, search, update author and book information
- Used EJS view engine to render page for different requests
- Applied MongoDB NoSQL to update and delete author and book information

Live Page: <a href="https://mybrary-by-xiao.herokuapp.com/books/new">https://mybrary-by-xiao.herokuapp.com/books/new</a>

Repository: https://github.com/xiaohua2003/Personal\_library

Travel APP | HTML | CSS | Javascript | Node. JS | Express

Mar. 2021

- Build a Travel application through HTML, CSS, JavaScript, Node.js, which informs users the
  current weather forecast if the trip within a week and predicts weather forecast if the trip is in the
  future. It displays an image of the location entered.
- Retrieved data from three API.
  - a. Pixabay API: display an image of the location entered
  - b. GeoNames API: retrieve coordinates
  - c. WeatherBit API: retrieve weather data

Live Demo: <a href="https://www.youtube.com/watch?v=TUplPt2DwEc&t=37s">https://www.youtube.com/watch?v=TUplPt2DwEc&t=37s</a>

Repository: https://github.com/xiaohua2003/Travel-App-

#### **User Management Systems**

May.2021

- Created user management systems application which can create, update, delete user information.
- Used EJS view engine to render page for different requests.
- Applied MongoDB to update and delete user information.

**Repository**: https://github.com/xiaohua2003/User-Management-Systems

# Github Finder Web Application with react

Apr.2021

- Designed a Github Finder application which allows user search Github User profile and Bio through retrieving data from the Github official API
- Researched React framework, built the application through React functional components, Hooks and Context
- Deployed application to Netlify

Live Page: <a href="https://nifty-lichterman-b24cc3.netlify.app/">https://nifty-lichterman-b24cc3.netlify.app/</a>

Repository: https://github.com/xiaohua2003/Github-Finder

Full Stack Aritzia-Feedback App | Python Flask | PostgreSQL | mailtrap.io

May 2021

 Created a feedback application using Python Flask as back end and PostgreSQL as database, use mailtrap.io to send email

Live Demo: https://www.youtube.com/watch?v=OKJ\_Se5NL\_Q&t=5s

Repository: https://github.com/xiaohua2003/Feedback-App

# WORK EXPERIENCE

#### **Research and Development Scientist**

SBI Fine Chemical Inc. Jan.2019-Present

- Apply quantitative and mathematical data analysis to scientific researches
- Applied excel Macro programing to scientific researches

Research Assistant May.2018-Nov.2018

University of Alberta

- Analyzed data using excel software & plotted images using Adobe Illustrator software and graphed data using GraphPad Prism7
- Developed public speaking and communication skills by giving project presentations
- Demonstrated excellent written communication skills by writing a fifty-page project report.

Research Assistant Jan.2016-Jul.2016

Fujian Agriculture and Forestry University, China

- Scientific publication: https://t-stor.teagasc.ie/handle/11019/2039
- Applied ultrasound scientific and mathematical approaches for chemical researches

#### SELECTED ACHIEVEMENTS

# Chinese State Scholarship

2016-2017

China Scholarship Council, China

• The scholarship is awarded based on academic performance & leadership

# **VOLUNTEER EXPERIENCE & COMMUNITY INVOLVEMENT**

Classroom mentor Jan.2018-Feb.2018

U School at University of Alberta, Edmonton AB

- Led and participated in students small group activities to help students with their journaling and sketching
- Shared study experience at the U of A with U school students
- Led groups from one activity site to another and helped guide students around campus

Volunteer Nov.2017

University of Alberta Invest in Your Future Career Symposium 2017, Edmonton AB

• Collaborated with other volunteers to guide conference attendees

#### University of Alberta Open House Volunteer

Oct.2016

University of Alberta, Edmonton AB

• Answered students' questions and shared study experience at University of Alberta

#### Vice-President at Student's Club

Sep.2014-Jul.2015

Faculty of Food Science at Fujian Agriculture and Forestry University, China

- Organized the Outstanding Alumni Events which invited outstanding alumni to share their working experience with the students
- Cooperated with other 7 club members to host the flea market to sell the used goods donated from students, and the money made from this event was donated to a rural primary school