

Xiaohua Cai

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SKILLS

Languages & Frameworks

HTML/CSS/SASS, JavaScript, React, Angular, TypeScript, Material UI, Node.js, Express, PHP, Laravel, Python, Visual Basic 6.0, jQuery, Bootstrap

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

Software Architecture: RESTful API, MVC

EDUCATION

Front-End Web Developer NanoDegree from Udacity

December 2020- March 2021

Master of Science, Bioresource Technology
University of Alberta

September 2017- December 2018

GPA3.7/4.0

Bachelor of Engineering, Biotechnology
Fujian Agriculture and Forestry University, China

September 2013- June 2017

core courses: GPA3.7/4.0

- Studied at the University of Albert as a visiting student from 2016 to 2017

Certificate: *Provincial Computer Rank Examination* in **Information Technology & Visual Basic 6.0**

Awards:

- Awarded by the Chinese State Scholarship (CSC) program to support students with exceptional academic achievements to study abroad for one academic year. (value: \$17,000 CAD). Awarded with Third-Class Excellent Academic Scholarship 2015-2016
- Awarded with China National Scholarship. Second-Class Excellent Academic Scholarship 2014-2015
- First-class Excellent Academic Scholarship. Valued as merit student. Received a second-prize of debate competition 2013-2014

WORK EXPERIENCE

Full Stack Developer

January 2022 - Present

AMI RockChain Inc.

- Built front end features using Angular, TypeScript and Nebular UI library according to the Figma design
- Created RESTful APIs in PHP Laravel Framework and implemented CRUD operations to read, create, update and delete data
- Generated migration and set up relational data models
- Built queries to retrieve data from PostgreSQL database
- Adapted Model-View-Controller (MVC) pattern to develop web applications
- Built web mapping applications using Leaflet library and Google map API
- Managed subscribed members using MailChimp API
- Developed a graph tool using Echarts Library for user entering data into table to automatically generate charts

Full Stack Developer (Contract)

September 2021 - January 2022

Explorer Hop

Project 1: *Internal used app*

- Built front end features using React.js, Material UI, TypeScript
- Built RESTful API and backend logics with Node.js Express, PostgreSQL
- Worked closely with the designer to implement web app user interfaces

Project 2: *Shopify App*

- Built Shopify admin app frontend features using React.js, Shopify App Bridge and Polaris components
- Implemented queries to update, retrieve data from Shopify GraphQL API
- Implemented webhooks into app to notify the app when user create a product order

Research and Development Scientist

January 2019- September 2021

SBI BioEnergy Inc.

- Calculated mass balance for 10+ lab-scale reactors through Visual Basic Programming
- Applied software applications to automatically control various chemical reaction process.
- Analyzed data, tabulate and present data to the process and catalyst development team on regular basis
- Developed new analytical methods as required to analyze and access properties of catalyst and biofuel product samples

CODING PROJECTS

Full Stack Chat App

April 2021

Use client-side and server-side WebSockets to create connections and broadcast messages

Front-end: React **Back-end:** Node.js, Express, Socket.io **Deployment:** Netlify, Heroku

[Live Page](#) [Repository](#)

Full Stack Library App

May 2021

An MVC pattern-based application. Applied MongoDB, NoSQL. Used EJS view engine to render pages, it allows user to add, search, update information.

Front-end: CSS **Back-end:** Node.js, Express, MongoDB, Mongoose, EJS **Deployment:** Heroku

[Live Page](#) [Repository](#)

Travel APP

March 2021

A weather forecasting application. Data retrieved from three APIs: Pixabay API to display an image of the location entered, GeoNames API to retrieve coordinates, WeatherBit API to fetch weather data.

Front-end: HTML CSS **Back-end:** Node.js, Express

[Demo](#) [Repository](#)

Loan Repayment Calculator Mobile App

July 2021

Technology: Java & Android Studio

[Repository](#)

Full Stack Feedback App

May 2021

Front-end: HTML, CSS **Back-end:** Python Flask, PostgreSQL, maitrap.io

[Demo](#) [Repository](#)

User Management Systems

May 2021

Applied MongoDB to update and delete user information, used EJS view engine to render pages.

Front-end: CSS **Back-end:** Node.js, Express, MongoDB, Mongoose, EJS

[Repository](#)

Github Finder

April 2021

This application allows users search Github account profiles and Bios through retrieving data from the Github API.

Front-end: React functional components, Hooks & Context **Deployment:** Netlify

[Live Page](#) [Repository](#)

Landing page | HTML | CSS | JavaScript

January 2021

[Live Page](#) [Repository](#)

TinDog Web Application | Bootstrap | HTML | CSS

February 2021

[Live Page](#) [Repository](#)

Restaurant Website | Bootstrap 4 | HTML | CSS | jQuery

June 2021

[Repository](#)

Computer Science Course Completed	Relevancy	Grade
Fundamentals of Information Technology	Data Structure and Algorithm, Fundamental concepts in C.S.	80/100
Experiment for Information Technology Foundation	Introduction to SQL, Database Systems, Intro to software engineering, hardware systems and operation system	98/100
Visual Basic Programming	Visual Basic 6.0	78/100
EDPY 500 Introduction to Data Analysis in Educational Research	Sampling distributions and the central limit theorem, hypothesis test	A

Online Computer Science Course Completed	Relevancy	Grade
Introduction to Python Programming (through Coursera)	Python, data structure	pass
Managing Big Data with MySQL (through Coursera)	MySQL Relational Databases	pass
Front End Web Developer Nanodegree (Udacity)	HTML, CSS, JavaScript	pass
Front-End Web UI Frameworks and Tools: Bootstrap 4	HTML, CSS, JavaScript, Bootstrap 4	pass

RESEARCH PROJECT EXPERIENCE

Graduate Capstone Project

May 2018- November 2018

University of Alberta

- Synthesized and characterized canola oil amphiphilic block copolymers as nano drug carrier.
- Analyzed data using Microsoft Excel & plotted images using Adobe Illustrator software & graphed data using GraphPad Prism7
- Delivered professional presentations and submitted a fifty-page written scientific research paper

Undergraduate Capstone Project

January 2016- July 2016

Fujian Agriculture and Forestry University

- Conducted a scientific research. An author of a published scientific research paper.

Publication URL: <https://daneshyari.com/article/preview/8881478.pdf>