

Xiaohua Cai

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SKILLS

Languages & Frameworks: HTML/CSS/SASS, JavaScript, React, Angular, TypeScript, Node.js, Express, Next.js, Python, PHP, Laravel, Visual Basic 6.0, Material UI, Bootstrap, jQuery
Systems & Database: PostgreSQL, MySQL, GraphQL, MongoDB, Git/Github, Heroku, Netlify, Docker
Software Architecture: RESTful API, MVC

EDUCATION

Master of Science in Computer Science, **Georgia Institute of Technology** September 2022-December 2025
Completed Courses: GPA 4.0/4.0

Front-End Web Developer NanoDegree, **Udacity** December 2020- March 2021

Master of Science in Bioresource Technology, **University of Alberta**, GPA 3.7/4.0 September 2017- December 2018

Bachelor of Engineering in Biotechnology, Fujian Agriculture and Forestry University, China, GPA 3.7/4.0 September 2013- June 2017
Studied at the University of Alberta as a visiting student from 2016 to 2017

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 a merit student. Received a second-prize of debate competition 2013-2014
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WORK EXPERIENCE

Full Stack Developer December 2022 - Present
Affinity Bridge Inc.

- Design and implemented responsive front-end features using React.js, TypeScript, resulting in improved user experience and overall performance
- Built internal/client projects using Next.js and implemented authentication by integrating NextAuth.js
- Engineered RESTful APIs in PHP, optimizing data management by building efficient SQL queries for CRUD operations in MySQL database

Full Stack Developer January 2022 - December 2022
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 processes.
 - 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
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CODING PROJECTS

Full Stack Chat App [Live Page](#) [Repository](#)

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

Full Stack Library App [Live Page](#) [Repository](#)

May 2021

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

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

Travel APP [Demo](#) [Repository](#)

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

Loan Repayment Calculator Mobile App Java & Android Studio [Repository](#)

July 2021

Full Stack Feedback App [Demo](#) [Repository](#)

May 2021

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

User Management Systems [Repository](#)

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

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

April 2021

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

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

Landing page | HTML | CSS | JavaScript [Live Page](#) [Repository](#)

January 2021

TinDog Web Application | Bootstrap | HTML | CSS [Live Page](#) [Repository](#)

February 2021

Restaurant Website | Bootstrap 4 | HTML | CSS | jQuery [Repository](#)

June 2021

Completed Certificate: *Provincial Computer Rank Examination* in **Information Technology**

Computer Science Course Completed	Relevancy	Grade
Fundamentals of Information Technology	Data Structure and Algorithm, Fundamental concepts in C.S. Introduction to SQL, Database Systems, Intro to software engineering, hardware systems and operation system	80/100
Experiment for Information Technology Foundation		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 carriers.
- 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 scientific research. An author of a published scientific research paper.

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