

Bo Bonning | Software Engineer

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My background as a Ph.D. level research engineer in chemical engineering has proven to be an essential asset in advanced problem-solving. I'm looking for a career in programming to leverage my background and my skills in C, C#, python, and JavaScript to solve issues.

Languages - JavaScript, HTML, CSS, Python, SQL, JSON, C, C#

Database - PostgreSQL, SQLite, MongoDB | **Other** - AWS, RESTful Routing, REST APIs, Git, LLMs, Docker

Libraries and Frameworks – React, Express, Django, Flask, JQuery, Tailwind, Langchain

Software Development Projects

January 2023 - PRESENT

solve. – Problem solving application

- MERN-stack application (MongoDB, Express, React, Node.js) deployed using Heroku
- Incorporates OpenAI API and OCR API to solve problems from images, and AWS S3 for storage
- JWT based authentication and Tailwind for styling.
- Utilized Git control for version management.

Chemi – Chemistry application for compound lookup and folder management

- MEN-stack application (MongoDB, Express, Node.js) deployed using Heroku
- Search engine utilized PUG REST, a PubChem API and ChemDoodle Web Components for compound lookup.
- Implemented Google's Oauth for authentication

DocuChat– Chat with documents application

- MERN-stack application (MongoDB, Express, React, Node.js) deployed using Heroku
- Incorporates different LLMs including GPT 3.5 and models from HuggingFace through LangChain
- Store documents using AWS S3, and handle locally with Docker

Professional Experience

Software Engineer Fellow | General Assembly | Remote

April 2023 - PRESENT

- Working on software engineering projects, including team collaboration, all within a remote environment.

Graduate Research Engineer | Tennessee Tech University | Cookeville, TN

August 2015 – August 2020

- Graduate research in the cryogenic electronics research lab at TT

Battery Research Engineer Intern | Oak Ridge National Lab | Oak Ridge, TN

May 2016 – August 2016

EDUCATION

General Assembly | Remote

April 2023 - PRESENT

Software Engineering Immersive: Intensive 12-week program focused on full-stack development, object-oriented programming, and team collaboration.

Harvard University's CS50 on edX | Remote

December 2022 – February 2023

Certified completion of Harvard's Introduction to Computer Sciences

Tennessee Technological University | Cookeville, TN

2010-2020

Ph.D., Chemical Engineering

B.S., Chemical Engineering | B.S., Chemistry | B.S., Cellular Biology