

# Brian Nguyen

briancoco@tamu.edu | 512-577-3057 | 5004 Patagonia Pass Austin, TX 78738

## EDUCATION AND HONORS

**Texas A&M University** School of Engineering

College Station, TX

Bachelor of Science in Computer Science

May 2025

- Cumulative GPA: 4.0/4.0
- Awards: Regent's Scholarship, Dean's List
- Relevant Coursework: Machine Learning, Statistics I & II, Data Structures and Algorithms, Computer Organization, Discrete Structures for Computing, Intro to Computer System, Programming Studio

## PROFESSIONAL EXPERIENCE

**Paycom**

Grapevine, TX

*Software Developer Intern*

May 2023 - August 2023

- Designed and implemented an enterprise-level business intelligence tool to visualize, analyze, and aggregate 1.5 TB of unstructured data for non-technical users.
- Developed a scalable and secure API using **PHP** for querying structured data from **MySQL** databases with input sanitization to mitigate **SQL injections**.
- Lead the development of the Front-end using **React** and **TypeScript**, reducing client report generation time by 95% for non-technical users.
- Optimized existing logic for graph rendering in **React**, leading to a 92% increase in speed.

**Texas A&M University**

College Station, TX

*Teaching Assistant*

August 2023 - December 2023

- Responsible for managing a classroom of approximately 100 Computer Science students.
- Tutor and lecture students on advanced data structures and algorithms, furthering their knowledge and understanding.
- Create teaching plans and lessons to meet both long-term and short-term academic goals.

## SKILLS & CERTIFICATIONS

- **Programming Languages:** JavaScript, TypeScript, HTML, CSS, Python, C++, PHP
- **Web Development & Miscellaneous Technologies:** React.js, Node.js, Express.js, SQL, MongoDB, Git, Jest, Jira, AWS, Cloud Computing, Lambda, Unit Testing, OOP, Microservices, Full-Stack
- **AWS Certified Cloud Practitioner:** Validates foundational, high-level understanding of AWS Cloud, services, and terminology. (**Validation ID: 11ZGGHV2X1RQQD9Q**)

## PERSONAL PROJECTS

**RevTube**

*React.js, Node.js, Express.js, MongoDB, JavaScript, HTML, CSS*

- Developed a full-stack web application for video streaming Aggie related content.
- Utilized **Node.js** and **Express.js** to create the web server responsible for handling video streaming, video uploads, and user authentication.
- Used **MongoDB** to securely store video metadata along with hashed user data.

**Spotisky**

*Flask, Python, HTML, CSS*

- Creator of an interactive web application for users to receive horoscopes based on their top Spotify data.
- Integrated Spotify API to authenticate and pull user's top Spotify data, and **Flask** to integrate data with **HTML** to dynamically display horoscopes.
- Implemented algorithm to determine user's horoscopes based on metrics such as danceability, energy, tempo, and loudness.

**Seam Carving**

*C++*

- Built a command line interface program for content-aware image resizing through the seam carving method.
- Implemented algorithm to identify and remove unimportant pixels to match user's specified dimensions using the dual gradient energy function.
- Incorporated **Object-Oriented Programming** and **File IO** to read and accurately represent an image's pixels.

**Skribbl Clone**

*React.js, Node.js, Express.js, JavaScript, HTML, CSS, WebSockets*

- Built a full-stack clone of Skribbl, a popular online drawing and guessing Pictionary game.
- Utilized **WebSockets** for open communication between client and server, allowing drawings and game data to be conveyed in real-time.