

# Ryan Chan

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## EDUCATION

### California Institute of Technology

June 2020 – **Expected** June 2024

Bachelor of Science in Computer Science

GPA: 3.90

**Coursework:** Algorithms, Relations and Databases, Computing Systems, Web Development, Software Design, Decidability and Tractability, Functional Programming, Discrete Mathematics

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## TECHNICAL SKILLS

**Programming Languages:** Python, Java, C, C#, MySQL 8.0, ECMA6 JavaScript, TypeScript, HTML5, CSS, OCaml

**Technologies:** Flask, React, Node.js, GraphQL, Azure DevOps, Git, .NET, Linux, BigQuery, Firebase

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## EXPERIENCE

### LoopNet CoStar | Software Development Intern

Jun 2022 – **Present**

- Implemented and tested the LoopNet European transaction back-end with the ecom dev team in **C#** and **SQL Server**
- Created **API** endpoints called with **GraphQL** to make purchases, update data, and manage anonymous checkouts
- Improved the LoopNet website in **React** and **TypeScript** to localize for regional dialects, pricing, and business rules
- UK development and deployment saw June ecommerce profits rise **47%** and saw a year over year jump of **131%**
- Worked in an **Agile** environment including daily stand-ups, three-week sprints, and one-on-one meetings

### CoStar Group | Data Analyst Intern

Dec 2021 – Jun 2022

- Deployed a dashboard tracking over **19 billion** listings using **BigQuery** and **DataStudios** to isolate business trends
- Discovered key disparities in Costar's retargeting algorithms leading to improvements in coverage and reach of ads
- Developed a **Google Perspective** program to parse **1.7 million** client messages for inappropriate messages or content

### NASA JPL | Software Development and Research Intern

Jun 2021 – Aug 2021

- Co-authored on an investigation of temporal and longitudinal influences on Jupiter's atmosphere
  - Presented findings to the **Asia Oceana Geosciences Society** and **JPL Summer Undergraduate Research Fellowship**
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## PROJECTS

### Reach Out | Mobile Social Media App (Spring 2022)

Devpost, GitHub

- Won **Best Overall Hack** at **Hacktech 2022** (Caltech's annual hackathon) for its uniqueness and technical prowess
- Provided chatting, real-time friend "status" feed, and user authentication using **React Native** and **Firebase**

### Tennis History Tool | Database Project (Winter 2021)

GitHub

- Built a **MySQL** database with password access and encryption, routine/trigger updating, and appropriate functional dependencies to store tennis tournament and ranking histories from 2000 – 2021
- Managed permissions to allow users to login, update, and query the database in their terminal using a **Python** integration

### Fantasy Basketball Drafting Tool | Web Application (Summer 2021)

GitHub

- Developed a predictive model for player outputs while gaining experience in **NumPy**, **Pandas**, and **Beautiful Soup**
  - Over **2000** people used the **Python/Flask** web application in their drafts for the 2021-2022 season
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## LEADERSHIP

### Teaching Assistant | Caltech CS 1: Computer Programming

August 2022 – **Present**

- Teaching programming fundamentals to develop an understanding of **object-oriented programming** in Python and Java
- Designing a project-based curriculum to teach pair programming, communication, and collaboration
- Building good **code practices** by introducing documentation, testing, and code quality guidelines

### Caltech Data Science Organization

September 2020 – **Present**

- Creating networks for Caltech students in the data science industry through workshops, competitions, and more