Ethan Racine

Email: ethanras@gmail.com

LinkedIn: https://www.linkedin.com/in/ethan-racine-5a708927a/

GitHub: https://github.com/EthanRacine

Project Portfolio: https://ethanracine.github.io/Portfolio

Mobile: 0428 060 878

Graduate Software Engineer | Full-Stack Development Enthusiast

I've recently completed a Bachelor of Engineering (Honours) specialising in software engineering and am eager to begin my career in a technology consulting graduate program or software firm where I can apply my passion for full-stack development and contribute to impactful projects.

KEY SKILLS

- Programming Languages (Python, SQL, Java, JavaScript/TypeScript, Swift, C, C++, C#, R, PHP)
- Front-end (React.js, HTML, CSS)
- Back-end (Node.js, Express.js, Laravel, Next.js)
- iOS App Development
- Version Control (GitHub, GitLab)
- Business Intelligence (Tableau, Power BI)
- RESTful APIs
- Machine Learning

- Databases (MySQL, PostgreSQL, MongoDB, Cassandra, Neo4j)
- Cloud Platforms (AWS Lambda, IAM, DynamoDB, S3. Azure – Synapse Analytics)
- UI/UX Design (Figma)
- Development Practices (Scrum, CI/CD)
- Docker
- Linux
- MS Office
- Teamwork
- Creative Thinking
- Interpersonal Communication Skills

EDUCATION

Haileybury College

Graduated in 2019

- ATAR of 92.35
- Mathematical Methods, Further Mathematics, Software Development, Physics, French and English

Monash University

2020-2024

Bachelor of Engineering (Honours)
Specialisation – Software Engineering

WORK EXPERIENCE PLACEMENT

CSIRO INFORMATION TECHNOLOGY

OCTOBER 2017

Spent a week at the Clayton Branch as a part of my Year 10 work experience.

WORK HISTORY

TENNIS COACHING

JANUARY 2019 - CURRENT

Have been restringing tennis racquets and coaching tennis since I graduated from high school. Coaching at Melbourne Grammar School and BTA Turbo Tennis for both children and adults.

ANGLE AUTO FINANCE - INTERN

JANUARY 2023 - FEBRUARY 2023

 $\hbox{6-week internship with an auto finance company that provides personal and business car loans.}\\$

Achievements and Contributions

- Created a Star Schema of the cloud data warehouse
- Wrote queries in SQL to remove duplicate records from the data warehouse

 Undertook extensive research to develop an understanding of various technologies and technology areas within the business, particularly with Data and Analytics

Skills

- Technical Skills: Azure Synapse Analytics, SQL, Power BI
- Soft Skills: Communication, Teamwork, Time Management

Forage Data Analytics Consulting Virtual Internship (KPMG)

May 2023 - June 2023

Completed Practical Tasks in:

- Data Quality Assessment
- Data Insights
- Data Insights and Presentation

Skills

• Technical Skills: MySQL Workbench, Excel, PowerPoint, Tableau, Power BI

ANGLE AUTO FINANCE – DATA INTERN

JANUARY 2024 - MAY 2024

Worked one day-a-week for a 6-week period during my holiday, and am continuing this during the university semester as part of the data engineering team at an auto finance company that I had an internship with in Summer 2023 as well.

Achievements and Contributions

- Optimised stored procedures
- Identified why duplicates were being produced in the data pipeline
- Performed data mapping between Loome software and the data warehouse to ensure data consistency and integrity

Skills

- Technical Skills: Azure Synapse Analytics, SQL, Data Mapping, Data Analysis, Python
- Soft Skills: Problem-Solving, Attention to Detail, Communication, Team Collaboration

PROJECTS

iOS Chants App APRIL 2023 – CURRENT

- Identified a gap in the market for apps allowing soccer/football fans to create and share chants for their favourite teams, so during my university holidays I've been developing an iOS app which addresses this.
- Implemented functionalities including user authentication (email & Google), team selection, chant creation (text, microphone recording, video upload), chant viewing, and a voting system (like/dislike).
- It's built in Xcode and written in SWIFT. I've used Firebase for user authentication, real-time database management, and storage of videos/audio files.

Website for a Restaurant in Malaysia

FEBRUARY 2024 – NOVEMBER 2024

- Identified a gap in the digital presence of restaurants in Malaysia compared to Melbourne, leading to missed opportunities for online orders and table reservations.
- Collaborated with university colleagues to develop a user-friendly website and to bridge this gap.
- The website empowers customers to browse menus with enticing photos, conveniently place online pre-orders or make reservations, as well as get rewards from a loyalty program.
- It's been written in JavaScript, using React.js for the front-end, Laravel (PHP) for the back-end, Supabase for authentication, and MySQL for database management.
- I took on the role of Scrum Master, which involved organising and moderating scrum events (such as our stand-up meetings, sprint planning sessions, reviews, and retrospectives), also ensuring that the team was following the scrum process and agile principles. I also helped our Product Owner to manage the product backlog and prioritise requirements.
- In terms of development, for this project I created storyboards on Figma for our client, setup a Laravel project with React, added a hook to fetch data from the API, created the initial front-end and back-end of the menu page similar to UberEats, and made the page responsive for different screen sizes.

AI-Driven Study Application

FEBRUARY 2024 – NOVEMBER 2024

- Collaborated with a startup software consulting company (FirstIQ Solutions) and university colleagues to develop an application that utilises AI and Machine Learning (ML) to streamline the study process for students.
- The application aimed to convert PDFs containing exam-style material into customisable flashcards
- The tech stack we used is React.js for the front-end, Supabase for the back-end, which uses PostgreSQL for a relational database, and OpenAI's ChatGPT 3.5 model for the LLM.
- I took on the role of Scrum Master, which involved organising and moderating scrum events (such as our stand-up meetings, sprint planning sessions, reviews, and retrospectives), also ensuring that the team was following the scrum process and agile principles.
- In terms of development, for this project I worked primarily on the front-end, developing components such as the sidebar and topbar which are used across most pages in the application, as well as the Create Flashcards Page, which involves creating a multiple page popup that starts with filling in a form and uploading a pdf document which is used for the next page where the flashcards get generated. I've also developed most of the front-end for the settings and have setup the front-end for upgrading to a premium account.

PantryPlanner

JANUARY 2025 – CURRENT

- Solo project developing a web application designed to help users plan meals based on the ingredients in their pantry, with the aim of reducing food waste and saving money
- The app allows users to explore recipes using advanced filtering and sorting options, compare prices per portion based on real-time pricing data from major Australian supermarkets, import recipes from URLs, photos and text, and generate shopping lists that highlight the most cost-effective choices.
- Key features include pantry inventory tracking, a meal planning schedule, login authentication, and a subscription model with monthly payments and a free trial, integrated using Stripe.
- Built using React and Next.is for the frontend, with Supabase providing backend services and a

PostgreSQL relational database. JavaScript is used for processing pricing data and maintaining product information.

VOLUNTEER PLACEMENTS

St. Matthew's Soup Kitchen

JULY 2015

Volunteered at a local soup kitchen providing meals to the homeless and people with disabilities.