

# OISIN FITZPATRICK

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[GitHub](#) | [Personal Site](#) | [Game Projects](#) | [LinkedIn](#)

Recent master's degree recipient and Software Engineer, seeking employment opportunities for Software Engineering Roles. Previous undergraduate experience in digital games development. Proficiencies include ReactJS, Software Design/Architecture, and UX Research and Design.

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## EDUCATION

### MSC ADVANCED SOFTWARE DEVELOPMENT | TECHNOLOGICAL UNIVERSITY DUBLIN

January 2024

- Relevant Coursework: Software Design, Programming Paradigms, Web Application Architectures, Advanced Databases, Secure Systems Development, Systems Architectures, UX Design, Data Visualization.
- Provisional Result: First-Class Honors.

### CPD DIPLOMA FUNDAMENTALS OF COMPUTING | TECHNOLOGICAL UNIVERSITY DUBLIN

May 2022

- Relevant Coursework: Architecture, Operating Systems & Networks, Systems Analysis, Web & UI Design, Object Oriented Software Development.
- GPA: 91%.

### BA GAME DESIGN | TECHNOLOGICAL UNIVERSITY DUBLIN

May 2021

- Relevant Coursework: Games Programming, Game Tools, Production, Game Engines, Prototyping.
  - Result: 2.1 (Upper Second-Class Honors)
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## WORK EXPERIENCE

### FRONTEND ENGINEER INTERNSHIP | HOUGHTON MIFFLIN HARCOURT | DUBLIN

June 2023 – August 2023

Refactored the Teacher Dashboard application on HMH Ed, raising test coverage for newly added functionality from 0% to 90% code coverage, and reducing the lines of code in the main application script by ~35%. Assisted and collaborated with fellow engineers to handle and prevent blockages in the deployment pipeline, being noted for my diligence and adherence to best practices.

- Frontend Engineer Internship as part of a full stack team, working on the HMH Ed application.
- Wrote Unit and Integration tests for code coverage.
- Used Jenkins + GitHub as part of deployment pipeline, including E2E testing and triaging.
- Daily Standups and regular communication with team/other staff to coordinate and diagnose problems.

### RETAIL SUPERVISOR | MOUNTAIN WAREHOUSE

June 2021 – October 2021

Promoted to Supervisor after helping to re-establish store operations post-lockdown. During this difficult sales period, I helped staff meet sales KPIs, and coordinated with senior management to achieve week-to-week goals.

- Performed managerial duties including store banking and operations, and staff management/coordination.
- Mediated conflicts between agitated customers and staff.
- Fostered good relations with fellow staff and security members and contributed to a positive working environment during stressful times.

## RETAIL ASSISTANT | MOUNTAIN WAREHOUSE

October 2019 – June 2021

Joined Mountain Warehouse during 3<sup>rd</sup> year of undergraduate, working through final two years of college and throughout the COVID lockdowns. Assisted customers in finding the products that best suited their needs, giving advice and recommendations based on personal experience.

- Helped in daily operation of the store, providing customer service skills, maintaining store standards, and being a diligent and dependable worker during difficult period of store operations following COVID 19 reopening.
- Eventually promoted to supervisor in recognition of my efforts.

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## SKILLS

### SOFTWARE DESIGN AND SOFTWARE DEVELOPMENT

- Knowledgeable in processes and techniques involved in the design and development of software.
- Strong grasp on the utility of Software Design Patterns.
- Experience in development methodologies such as Agile.
- Practice in analyzing problems and researching solutions.

### PROGRAMMING

- Strong Understanding of OOP and Functional programming paradigms.
- Proficient in multiple languages such as JavaScript, C#, and Python.
- Focus on Web development creating user interfaces with React and Material UI.

### UX RESEARCH AND UX DESIGN

- Outlining project requirements and conducting user research/evaluation.
- Understanding of Design Principles & Guidelines, and of Design Systems.
- Focused on Accessibility and Usability.
- Proficient with prototyping tools such as Figma.

### GAME DESIGN AND DEVELOPMENT

- Numerous Small Game/Prototype Projects.
- Games Scripting using C#.
- Development using Unity Game Engine.

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### OTHER SKILLS AND SOFTWARE PROFICIENCIES

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|-------------------------|-----------------|
| ○ JavaScript/Python/C#. | ○ R (language). |
| ○ React.                | ○ Jest.         |
| ○ Material UI.          | ○ SQL.          |
| ○ TanStack Query.       | ○ Jenkins.      |
| ○ Git / GitHub.         | ○ Jira.         |
| ○ NodeJS / Express JS.  | ○ Tableau.      |
| ○ Postman.              | ○ Code Review.  |

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## PROJECTS

### RENTING MADE EASY | UX DESIGN AND FRONTEND ENGINEER

October 2023 – December 2023

- Developed UI for Rental Listings website, focusing on usability and accessibility. Used tools such as Figma to design layouts and logos for the site, and to create prototypes for testing.
- Utilized libraries and external APIs for map views, authentication/authorization, and backend integration, such as React Leaflet, AWS Amplify Libraries, and TanStack Query.
- Performed evaluations, including User evaluation, Expert Reviews, and manual testing.
- Fully Documented Approach to Development, available within [Final Report](#).
- [User Interface Demo](#).
- GitHub Repository: <https://github.com/oisintheginger/mscfinalproject>.

## **HMH Ed Teacher Dashboard Refactor and Teacher Dashboard Error States | Frontend Engineer Intern**

August 2023

- Refactored large script into multiple Hooks and Components, while also creating test coverage for refactored behavior including unit/integration tests in Jest. Reduced lines of code by roughly 35%.
- Added new widget states to numerous widgets on the Teacher Dashboard of Ed, including error/empty states and toast alerts.
- Involved cross-team collaboration and back-and-forth from the UX team in Boston and in-house accessibility expert.
- Numerous Pull Requests, Code Reviews, and Testing.
- [Ed Error States Demo](#).

## **FACE2FACE BACKEND API | NODEJS BACKEND**

November 2023

- Created Backend API for a Daft.ie clone using ExpressJS and NodeJS.
- Featured Authentication/Authorization and Password Resetting.
- Used Middleware libraries such as Multer and AWS S3 storage for image storage.
- GitHub Repository: <https://github.com/oisintheinger/Face2FacePublicRepo/tree/main>.

## **PRESS REKORD | GAMEPLAY AND SYSTEMS PROGRAMMER**

September 2020 – May 2021

- Developed Game Event System, Quest Systems, Dialogue Systems, Final Boss Encounter, and Fly Enemy AI.
- Used Scriptable Objects to construct dialogue trees for the game.
- The Game Event system allowed for decoupled communication between various game systems, e.g. quest system could listen for dialogue events to fire so that quests could progress.
- [Demo Video](#).
- GitHub Repository: <https://github.com/oisintheinger/PressRekord>.