OISIN FITZPATRICK

Dunshaughlin, Co. Meath, Ireland | (+353) 086 374 5291 | oisintfitzpatrick@gmail.com GitHub | Personal Site | Game Projects | LinkedIn

Master's degree recipient seeking employment opportunities for Software Engineering roles. Proficiencies include Fullstack Development, Software Design/Architecture, and UX Research and Design. I embody diligence, openness to learning, and adaptability.

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.
- Result: First-Class Honors (81%).

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.
- O GPA: 91%.

BA GAME DESIGN | TECHNOLOGICAL UNIVERSITY DUBLIN

May 2021

- Relevant Coursework: Games Programming, Game Tools, Production, Game Engines, Prototyping.
- Result: Upper Second-Class Honors

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.
- O Daily Standups and regular communication with team/other staff to coordinate and diagnose problems.

RETAIL ASSISTANT -> SUPERVISOR | MOUNTAIN WAREHOUSE

October 2019 – October 2021

Assisted customers in finding the products that best suited their needs, giving advice and recommendations based on personal experience. Promoted to Supervisor after helping to re-establish store operations post-lockdown. During this difficult sales period, helped staff meet sales KPIs, and coordinated with senior management to achieve week-to-week goals.

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

SKILLS

SOFTWARE DESIGN & DEVELOPMENT

- Software Design Patterns.
- \odot $\,$ Research and Problem solving.
- Agile Development
- O Architecture & UML diagramming
- O API Design
- O C#, Java, JavaScript, Python
- Software Testing

OTHER SKILLS AND SOFTWARE PROFICIENCIES

- JavaScript / Python / C#.
- React / MaterialUI / TanStack Query.
 SQL / NoSQL.
- NodeJS / Express JS.
- Postman.
- Jest.
- Linux OS (Ubuntu).
- Virtual Machines.

- **GAME DESIGN & DEVELOPMENT**
- Numerous Small Game/Prototype Projects.
- Games Scripting using C#.
- Unity Game Engine.
 - Jenkins.
 - o Jira.
 - R / Tableau.
 - Figma.
 - Code Review.

PROJECTS

• Git / GitHub.

RENTING MADE EASY | FRONTEND DEVELOPER AND UX DESIGN

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.
- AWS Cloud Architecture (Amplify, Cognito, S3, Lambda), and TanStack Query.
- O Performed evaluations, including User evaluation, Expert Reviews, and manual testing.
- Fully Documented Approach to Development, available within Final Report.
- O <u>User Interface Demo</u>.
- GitHub Repository: <u>https://github.com/oisintheginger/mscfinalproject</u>.

HMH ED TEACHER DASHBOARD REFACTOR AND NEW 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.
- o Involved cross-team collaboration and back-and-forth from the UX team in Boston and in-house accessibility expert.
- O Ed Error States Demo.

FACE2FACE BACKEND API | NODEJS BACKEND

November 2023

- Created Backend API for a Daft.ie clone using ExpressJS and NodeJS.
- \circ ~ Featured Authentication/Authorization, Multer and AWS S3 storage for image storage.
- O GitHub Repository: <u>https://github.com/oisintheginger/Face2FacePublicRepo/tree/main</u>.

PRESS REKORD | GAMEPLAY AND SYSTEMS PROGRAMMER

September 2020 – May 2021

- O Developed Game Event System, Quest Systems, Dialogue Systems, Final Boss Encounter, and Fly Enemy AI.
- $\circ\quad$ 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.
- O <u>Demo Video.</u>
- GitHub Repository: <u>https://github.com/oisintheginger/PressRekord</u>.

- UX RESEARCH & DESIGN
- User research/evaluation and defining project requirements.
- Design Principles & Guidelines, and Design Systems.
 Focused on Accessibility and Usability.