

# Ashley Cook Frontend & Rendering Engineer

<https://ashley-cook.wixsite.com/software-engineer>

Frontend and rendering-focused software engineer with 7+ years of experience building React applications, TypeScript platforms, PixiJS/WebGL rendering systems, and performance-sensitive browser experiences. Experienced in frontend architecture, rendering pipelines, migration tooling, interactive visualisation, and enterprise SaaS development.

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## WORK EXPERIENCE

### Structureflow, Canvas Developer

August 2023 - present

- Led work on migrating StructureFlow's core application from SVG rendering to a Canvas-based system, contributing to a higher-performance frontend experience for large client diagrams and workflows,
- Developed React and TypeScript features across the platform's user interface layer, including metadata management, navigation systems, rich-text editing, and operational tooling,
- Developed new features using TypeScript within the Canvas rendering and interaction layers of the platform, contributing to diagram tooling, visual workflows, and core user interactions,
- Developed migration tooling and resolved complex data compatibility issues across legacy and modern platform versions, supporting large client diagrams and operational workflows,
- Contributed to import/export functionality supporting PPTX, Excel, CSV, Word, PDF, and image formats,
- Balanced delivery of new product features with ongoing modernisation of legacy systems, helping maintain long-term platform stability and maintainability,
- Worked directly with enterprise clients to resolve issues, support bespoke workflows, and improve usability across a complex product used in client-facing environments,
- Resolved 14 production issues in the first 8-9 working days after joining, showing rapid onboarding and immediate contribution in a large codebase,
- Worked effectively across both independent and collaborative development environments as the engineering team expanded over time,
- Leveraged AI-assisted development tooling including GitHub Copilot and Claude to improve development efficiency, debugging workflows, and delivery speed,

### Playco, Midweight Game Engineer

September 2021 - March 2023 (1 year, 7 months)

- Collaborated with PixiJS maintainers on next-generation rendering technologies, including WebGPU/WGSL work, browser rendering pipelines, realtime graphics performance, and rendering architecture improvements for interactive web experiences.
- Worked with WebGL, GLSL shader effects, and GPU-accelerated rendering techniques across browser-based games and realtime

## Frontend Engineering

TypeScript	JavaScript
React	Next.js
HTML / CSS	

## Rendering & Interactive Systems

PixiJS	WebGL
Canvas API	
GLSL / Shaders	

## Platform & Tooling

Node.js	REST APIs
Git / GitHub / GitHub Actions	
Jest	ESLint

## Workflow & Collaboration

Figma	Jira
Agile / Scrum	
GitHub Copilot	
Claude	

- interactive applications.
- Developed games for multiple platforms including Facebook Instant Games, Discord, and web applications.
- developed the open-source Pixijs game [BUBBO BUBBO](#) independently, showcasing professional architecture, tooling, and development practices,
- Used player analytics and A/B testing data to guide gameplay iteration and improve engagement,
- Ported the game Ask Away cross-platform from Zoom to Discord,
- Collaborated in a small to medium-sized team to create high-quality instant games within tight timeframes.

## Goodboy Digital, Midweight Game Developer

November 2018 - October 2021 (3 years)

- Developed interactive experiences for the web, for companies such as **The BBC<sup>1</sup>**, **Saudi Aramco** and **Škoda<sup>2</sup>**.
- Worked on rendering-heavy interactive web experiences using WebGL, custom GLSL shader effects, Progressive Web Apps, AR for mobile, and non-Euclidean rendering techniques.
- Worked with industry giants to develop small to mid-sized web games and experiences,
- Ported Flash games to HTML5, including The Impossible Quiz, demonstrating modernization of legacy web experiences.
- Collaborated closely with artists, designers, and developers to deliver polished interactive experiences for the web.
- Contributed to both client-facing projects and internal tooling/research initiatives.

## EDUCATION

### University of Lincoln, Lincoln— BSc Games Computing (Hons)

September 2015 - May 2018

**First Class Honours**

### Boston College, Boston— Level 3 Extended Diploma in IT (Software Development)

September 2013 - July 2015

**D\* D\* D\* (Triple Distinction Star)**

### Saint Bedes Science College, Boston— GCSEs **9 GCSE's A\* - D including Math, English, and Science**

## Specialisms

**Rendering systems, graphics engineering, browser visualisation, WebGL and shader-driven rendering, Pixijs architecture, frontend performance optimisation, and interactive web applications.**

## Soft Skills

- Experienced collaborating directly with enterprise clients and cross-functional teams.
- Strong at rapidly onboarding into complex legacy systems and resolving production issues.
- Comfortable working independently on technically ambiguous problems.
- Rapidly adapts to complex legacy codebases and unfamiliar systems.
- Strong communicator bridging technical and non-technical stakeholders.
- Experienced balancing feature delivery, bug fixing, and long-term maintainability.

## Interests

**Graphics and rendering technologies, AI-assisted development workflows, Procedural content generation (PCG), Interactive web experiences, Emerging frontend technologies, Game jams and rapid prototyping**

<sup>1</sup> [The Dumping Ground: Face Your Fears](#) nominated for a [TIGA award](#)#

<sup>2</sup> [Skoda Enyaq IV Experience](#) won an [FWA Award](#)