

jamesbaghurst@gmail.com

WORK EXPERIENCE

RemNote

Founding Frontend and AI Engineer

*Remote
Nov 2021 - Present*

- Responsible for the backend and prompt engineering for all of RemNote's AI projects
- Implemented advanced AI-enabled user interfaces such as RemNote's Flashcard Copilot
- Sole maintainer of RemNote's plugin system and API
- Code ownership over the flashcard system, the core of RemNote's product

Oxford Technology

VC Summer Intern

*Oxford, UK
Jun 2018 - Aug 2018*

- Built financial models in Excel to evaluate technology startups

PROJECTS

Flashcard Copilot

RemNote's Flashcard writing copilot for students

*RemNote
Jan 2023 - Present*

- Implemented Copilot-style completions and Grammarly-style correctness checks for flashcards
- Developed RemNote's LLM request backend
- Built extensive prompt evaluation suites to ensure high quality completions
- Minimized latency using streaming and partial JSON parsing

Open Fresh

🔗 *Open source, AI-enabled meal planning and shopping.*

*Personal Project
Sep 2023 - Present*

- Created an AI agent and UI to design personalized meal plans for users
- Used Selenium to autonomously add groceries to users' grocery website accounts
- Added support for smart ingredient substitution and recipe updates to handle missing ingredients

TypeScript Type Fixing Agent

🔗 *Open source type error fixing agent for 100k+ line TypeScript codebases*

*Personal Project
Jan 2023 - Present*

- Automated fixing type errors using an AI agent which makes commits to your GitHub repository
- Added summaries of error fixing attempts so failures still help human coders fix the error
- Utilized TypeScript's compiler API to retrieve type information and provide context to the agent

AI Popper

🔗 *Open source chatbot for discussing the works of Karl Popper and David Deutsch*

*Personal Project
Sep 2023 - Present*

- Created text embeddings from YouTube video transcripts
- Used hypothetical document embeddings to improve embedding retrieval quality
- Supported the ElevenLabs streaming API to read responses aloud in the voice of David Deutsch

Chat with Channel

🔗 *Open source, user-friendly framework for creating YouTube channel chatbots*

*Personal Project
Sep 2023 - Present*

- Answers provide precise footnote references to relevant clips from the channel
- Minimal configuration required so non-technical users can use it

Contributions to Modelfusion

🔗 *Open source TypeScript library for building multi-modal AI applications*

*Personal Project
Nov 2023*

- Added support for SQLite vector search databases

EDUCATION

University of Edinburgh

BA (Hons) Chinese and German

*Edinburgh, UK
Class of 2021*

- First class degree with distinction in spoken Chinese

EXTRA INFORMATION

Portfolio: <https://bjsi.github.io/>

Twitter: <https://twitter.com/experilearning>

GitHub: <https://github.com/bjsi>

LinkedIn: <https://www.linkedin.com/in/james-b-792114a2/>

Programming Languages: I am most familiar with TypeScript, React, Node.js and Python

Languages: English (native), Chinese (fluent)