Projects showcase

Portfolio: https://qingjiatsang.top

Project: AI-Powered Resume Builder (AICV)

Role: Full-stack Developer
Live Site: https://aicv.qingjiatsang.top
Github Repo: https://github.com/QingjiaTsang/aicv
Objective:
Create a platform that helps job seekers build professional resumes using AI suggestions. The system should work in multiple languages and allow real-time editing.
Key Features Developed:
1. Built resume editor with drag-and-drop sections
2. Created AI optimization system that analyzes resume content
3. Implemented real-time preview that syncs with form inputs
4. Added multi-language support for Chinese and English interfaces

Technical Challenges:
1. Made resume sections sortable while keeping data synchronized between frontend and backend
2. Designed a system to handle complex resume data structure with TypeScript types
3. Implemented PDF generation that maintains layout consistency across different screen sizes
4. Optimized performance for handling large resume documents with many sections

Solutions Used:
1. Used React DnD for drag-and-drop functionality with touch/mouse support
2. Created a custom rich text editor integrated with AI suggestions
3. Developed reusable form components to keep code DRY
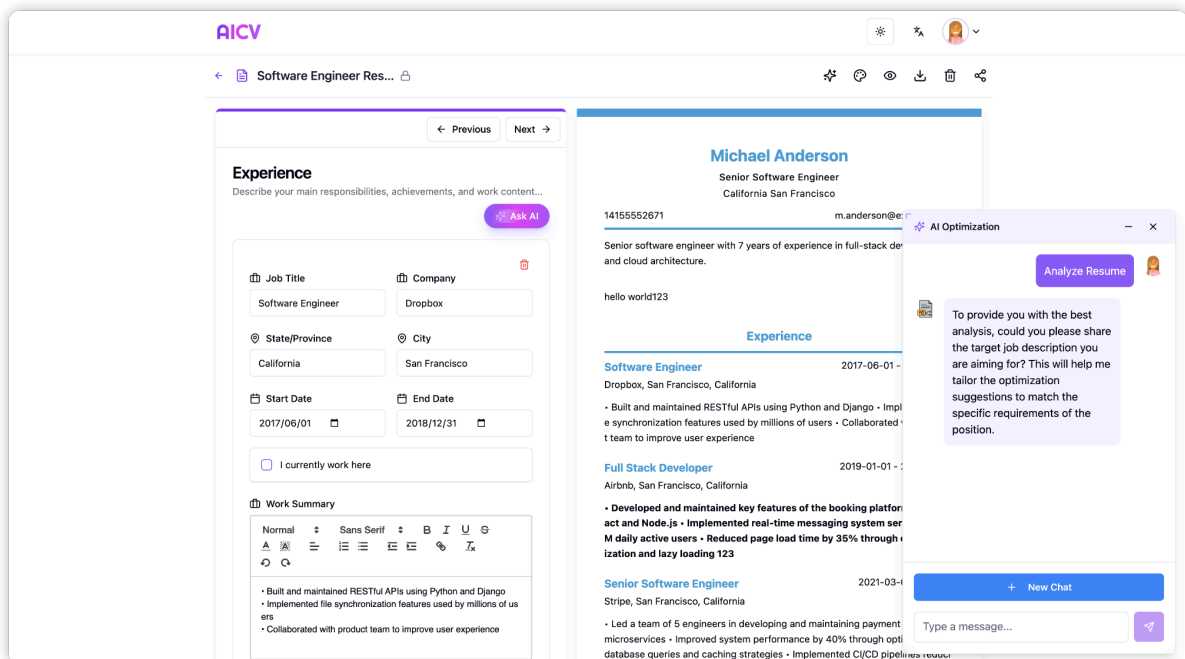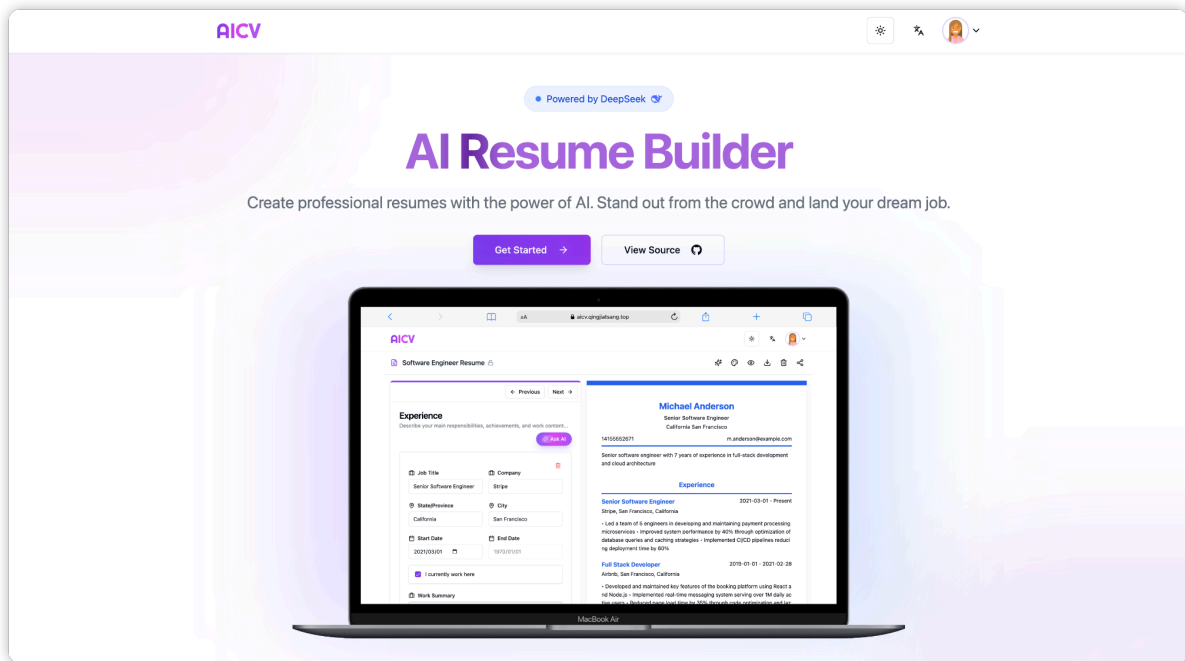4. Utilized Zod for type-safe form validation across all resume sections

Key Points:
1. Improved skills in complex form state management using react-hook-form
2. Gained experience implementing cross-device drag-and-drop interfaces
3. Learned to integrate AI suggestions while maintaining user control
4. Enhanced understanding of i18n implementation in large applications

Walkthrough Video:
https://www.youtube.com/watch?v=N3rN6brDnEI
Screenshots:

Project: Real-Time Collaboration Platform (Slack Clone)

Role: Full-stack Developer
Live Site: https://slack.qingjiatsang.top/
Github Repo: https://github.com/QingjiaTsang/slack-clone
Objective:
Build a modern team collaboration platform with real-time messaging, video calls, and

workspace management that matches Slack's core functionality while implementing improved developer ergonomics.

Key Features Developed:
1. Created real-time chat system with rich text formatting and image uploads
2. Implemented secure authentication flow with email verification and password reset
3. Developed animated landing page with scroll-triggered effects
4. Built workspace/channel management system with modals and form validation

Technical Challenges:
1. Synchronized message states across multiple clients with optimistic updates
2. Handled complex editor behaviors including image drag-and-paste and emoji integration
3. Managed nested route patterns for workspace/channel/message hierarchy
4. Implemented smooth animations without compromising component performance

Solutions Used:
1. Utilized Convex real-time database for state synchronization
2. Created custom ReactQuill integration with image handling modules
3. Designed atomic component structure with Shadcn UI primitives
4. Implemented scroll-based animations using Framer Motion
5. Built type-safe forms with Zod + react-hook-form integration

Key Points:
1. Improved skills in real-time system design with optimistic UI patterns
2. Mastered complex editor implementations with custom Quill modules
3. Enhanced understanding of Next.js advanced routing patterns
4. Gained experience with modern animation techniques in React
5. Strengthened type safety practices with Zod schema validation

Key Technical Highlights:
- Implemented 8-digit OTP verification flow with Resend email service
- Created reusable editor component handling both messages and threads
- Developed scroll-bound animations for landing page sections
- Built custom authentication providers with Convex integration
- Implemented video call functionality using Stream SDK
- Designed responsive layouts with Tailwind's arbitrary value support

This implementation demonstrates modern full-stack development patterns with strong emphasis on type safety, real-time updates, and maintainable component architecture.

Screenshots:

Experience the future of
Team Collaboration

Search in John's workspace   ⌘K

John's workspace ⌄

🗨 Threads
⤳ Drafts & Sent

⌄ Channels
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⌄ Direct Messages
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DMs
Activities
More

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英语学习

This channel was created on Nov 20, 2024. This is the beginning of the #英语学习 channel.

Wednesday, November 20

Qingjia Tsang 15:58
hello world

Tuesday, November 26

Qingjia Tsang 01:17

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