

# Kovu Jackson-Bentley

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Puzzle enthusiastic software engineer who is passionate about building solutions that exceed expectations. Seeking a full-time position that challenges skills and offers growth opportunities and experiences.

## Education

**Bachelor of Science in Game Design and Development, Minor in Software Engineering**

Aug 2024

Rochester Institute of Technology, GPA: 3.4

## Skills

**Languages:** C#, C++, CSS, HLSL, HTML, Java, JavaScript, Python, SQL, TypeScript

**Framework/Libraries:** DirectX 11, Jest Unit Tests, MonoGame, Node Package Manager, PixiJS, React, Sequelize

**Tools:** Discord API, GitHub Projects, Microsoft Office Tools, Swagger API documentation, Unity, Trello

## Professional Experience

**Long Term Substitute Teacher**, Education Support Services, Waterbury, CT

Jan 2025 – Present

- Created and maintained a website for students to access syllabus, guidelines, assignment metadata, and a grade predictor to track their progress accurately.
- Developed a script to reduce the use of language learning models in student assignments, improving academic integrity.
- Adapted to rapidly changing schedules and limited resources by improvising solutions and gathering weekly student feedback to iteratively improve future lessons.
- Delivered weekdaily detailed feedback on assignments, enabling iterative improvement
- Provided leadership by guiding students to establish future goals and develop problem-solving abilities

**Tools:** Google Classroom, JavaScript, Microsoft Office Tools, PowerSchool, React

**Software Engineer | Team Lead**, Crowd Comic, Internship

May 2024 – Aug 2024

Built a collaborative project that encourages users to create and/or read a “Choose Your Own Adventure” comic

- Created a database with API handlers for managing and modifying application information
- Authored comprehensive documentation for new developers, including project regulations with visual examples. Provided personal instructions for those needing further clarification
- Reviewed team members’ code to verify it was functional and followed our guidelines
- Guided and trained team members on effective use of tools and applications, including proper unit testing with Jest and appropriate React component usage

**Tools:** SQL, Sequelize, React, TypeScript, JavaScript, Jest Unit Tests, HTML, CSS, Github Projects, Discord API

**Teaching Assistant**, RIT

Aug 2023 – May 2024

- Provided individual support during lectures and workshops for college students
- Consulted with the professor on each student’s academic progress

**Mentor**, Society of Software Engineers, RIT

Nov 2022 – May 2024

- Lead exam review sessions for software engineering students
- Assisted students personally with coding and algorithmic assignments

**Hockey Game Usher**, RIT

Sep 2021 – Nov 2023

- Informed guests in detail of rules, regulations, and additional event information.
- Assisted guests with navigation throughout the arena.
- Exercised communication skills in order to provide advice and answers to guests.

**Software Engineer**, Arkhe, Internship

June 2022 – Aug 2022

Developed an AR/VR/XR teaching tool to help a professor explain functional programming to his students

- Collaborated with a remote Agile team to complete a design and move into implementation of code
- Prompted by peer feedback, refactored code to improve developer usability and modularity
- Developed a series of small projects, which were rapidly integrated together to build the final product
- Set up Jest unit testing and continuous integration scripts, reducing bugs encountered by a factor of 3
- Doubled key student outcomes metrics based on reduced assignment completion time and grades

**Tools:** Github Projects, Python, HTML, CSS, JavaScript, Node.js, Jest Unit Tests, Discord

## Projects

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**Stardew Valley Discord Bot Moderator**, Personal Project May 2025 – Present

Designed, developed, and currently maintains a Discord bot for automating notifications and improving user engagement in a Stardew Valley modding community server.

- Automated Twitch, YouTube, and GitHub notifications with smart filtering, cutting moderator workload and boosting engagement
- Established a separate staging environment with automated testing and a structured branching strategy
- Authored clear documentation for contributing developers, onboarding, PR guidelines, and testing practices.

**Tools:** Discord.js, Github API, JavaScript, Jest Unit Tests, Node Package Manager, Node.js, Twitch API, YouTube API

**Stardew Valley Perfectionist Guide**, Personal Project Nov 2024 – Present

Developing an interactive guide for 100% game completion based on players' game state

- Minimized reliance on external wikis by implementing progression tasks
- Implemented dynamic content updates to reflect players' in-game actions and milestones

**Tools:** C#, Monogame, Github

**Software Developer | Project Manager**, Mentor Schedule Maker, Group Project Aug 2024 – Present

Designed a schedule maker tool for a college academic organization's tutoring program

- Independently implemented an MVP to guide the final product's features and scope
- Automated schedule generation with multi-parameter customization to reduce schedule creation time
- Recruited current members from organization for beta testing and additional development support

**Tools:** React, GitHub, TypeScript, Node Package Manager, Node.js

**Repository Maintainer**, Keep Talking and Nobody Explodes Community Server Jan 2024 – Present

Manage a repository of all content related to game manuals, including community-created mods

- Handle requests from community members who are not as experienced with web development
- Review pull requests for repository standards and provide detailed feedback for necessary changes
- Update manuals to ensure visibility across all website states, including in dark mode and mobile layout
- Encourage non-maintainers to review documentation explaining all regulations of the repository

**Tools:** HTML, CSS, RegEx, JavaScript, JQuery, JSON, Discord

**Software Developer**, Discord Timestamp Converter, Personal Project Dec 2024 – Jan 2025

Developed a Discord bot to auto-parse timestamps based on timezone, time, and date

- Added a quality-of-life feature allowing users to omit date and time parameters, enhancing convenience
- Streamlined timestamp conversion process for improved user experience

**Tools:** Discord, Discord.js, GitHub, JavaScript, JSON, Node Package Manager, Node.js

**Software Developer**, Discord Link Parser, Personal Project Nov 2024

Developed a Discord bot that automatically parses social media links to display content embeds within the app

- Reduced user effort and time manually to get the "fixed" linked by a factor of 2
- Developed unit tests to verify regex works as intended, decreasing debugging time by a factor of 2
- Added util functions for server admins to easily moderate the bot and prevent spam

**Tools:** Discord.js, GitHub, JavaScript, Jest Unit Tests, Node Package Manager, Node.js, Regex, Trello

**Software Contributor, KTANE FAQ Discord Bot, Personal Project**

Oct 2024 – Nov 2024

Designed and implemented FAQ feature to Discord bot to streamline modding support and troubleshooting

- Optimized bot functionally to prioritize questions based on frequency of occurrence
- Increased visibility of some modding documentation/tutorials that were previously hidden in chats log
- Reduced the amount of time answer questions by a factor of 3

**Tools:** Discord, Discord.js, GitHub, JavaScript, Node Package Manager, Node.js

**Teacher | Software Developer, Unity Tutorial, Personal Project**

Sep 2024

Created a visual beginner-friendly Unity tutorial demonstration installation and scripting fundamentals

- Streamlined process of teaching Unity fundamentals, reducing individual explanation time for developers
- Documented tutorial in video and Google slides formats to accommodate various learning preferences
- Made Unity project repository public, allow easy access for developers to follow along with the tutorial

**Tools:** Adobe Premiere Pro, C#, Unity

**Software Developer | Lead Programmer, Traumatic Toybox, Team Project**

Jan 2024 – May 2024

Created a stealth horror game where the protagonist must escape the toy box full of murderous toys

- Discussed priorities and scope of the project along with morality of the team in weekly meetings
- Reviewed peer's progress on application and provided constructive criticism with visual guides
- Developed an intuitive HUD that informs the player where the enemies are, even if they're off screen

**Tools:** C#, Unity, Trello, Discord

**Software Developer, Casper Cat Cafe, Team Project**

Jan 2023 – Apr 2023

Designed and developed an engaging yet casual game. Explored creative and interactive solutions

- Independently developed a mini game that incentivizes users based on their rapid reflexes and cautiousness
- Discussed project process and progress with team members weekly to design and implement additional features
- After achieving MVP, implemented a file system to store user data upon game shutdown

**Tools:** C#, Unity, Trello, Discord

**Solo Developer, Ultimate Tic Tac Toe, Class Project**

Dec 2022

Created a Tic Tac Toe variant with 9 smaller boards, where winning boards contribute to a larger tic tac toe

- Gained proficiency in utilizing a JavaScript graphics library, and practiced front end interaction
- Implemented multiple rules to reward strategic thinking, ensuring a captivating experience

**Tools:** JavaScript, PixiJS

**Software Developer, Keep Talking and Nobody Explodes Solver, Personal Project**

Feb 2019 – Apr 2022

Created a puzzle solver for a cooperative game, focusing on enhancing C# programming and UI/UX design skills

- Designed an intuitive graphical user interface (GUI) to intuitively and quickly gather input from players and provide dynamic puzzle solutions, improving overall user experience and interaction
- Verified implementation stability with unit tests, decreasing bugs encountered at release

**Tools:** C#, Windows Forms