

KEVIN JUNYANG CUI

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WORK EXPERIENCE

Tools Programming Intern, Baldur's Gate 3

Larian Studios

📅 May 2024 – Aug 2024 📍 Quebec City, QC

- Custom tools development on in-house editor software for game development & production of Baldur's Gate 3
- Introduced new features such as a new interaction mode in the scene window, performed refactors, and patched bugs for both the regular (internal) and modding (community) in-house game editor
- Communicated and collaborated directly with scripters, artists, animators, designers, and QA across studios internationally

C# C++ C++ CLI .NET WPF WinForms Perforce
Jira

Programming Intern, Nondisclosure video game

Behaviour Interactive

📅 Sept 2023 – Dec 2023 📍 Montreal, QC

- Programmed on a medium-sized game development team, collaborating and communicating directly with artists and designers
- Implemented key features in animation and gameplay system in the early stages of a game development project
- Conducted code review for junior and senior programmers

Unity C# .NET Rider Perforce Jenkins Jira

Data Engineer Intern, Technology & Operations

RBC Royal Bank of Canada

📅 Jul 2021 – Aug 2021 📍 Toronto, ON

- Data provisioning, data pipeline automation, full-stack application development for database web portal, documentation generation

Hadoop HDFS Java Maven Python SQL JDBC
Node.js JavaScript Express Git Jenkins

Innovation Developer Intern, Technology & Operations

RBC Royal Bank of Canada

📅 Jul – Aug 2019 & Jul – Aug 2020 📍 Toronto, ON

- Full stack software development building internal web application

React Express Node.js TypeScript Java Git Angular
Spring SQL

CONTESTS & WALKTHROUGHS

- 🌐 devpost.com/kevinjycui
- 🏆 kevinjycui/advent-of-code-2020
- 🏆 kevinjycui/advent-of-code-2019
- 🏆 kevinjycui/picoCTF-2019-writeup
- 🏆 kevinjycui/Competitive-Programming

INDIE EXPERIENCE

Lead Programmer, SLEEP HERD

Lamp Katze Studio

📅 Feb 2024 - ongoing 🌐 lampkatze.com

- Designing and developing code infrastructure for indie game, owning feature implementations, refactors, bug fixes, etc. including gameplay, AI, & physics
- Leading team of 4 programmers. Creating roadmaps and setting milestones
- Performing dev-ops and tools programming to support artists, designers, and programmers
- Contributing to design, writing scripts & storyboards, composing music, filling in for artists on UI, concept art, animation
- Managing source control, conducting code review, creating documentation
- Managing recruitment, marketing, and production

Unity Git GitHub Blender

PROJECTS

kinnieplaylist.net

Character playlist database web-app

📅 Nov 2023 - Jan 2024 🌐 kinnieplaylist.net

- Solo full-stack developed a React front-end, Flask back-end web-app, MySQL database for compiling character playlists

React MySQL Flask DigitalOcean
Nginx JavaScript Python Bash
REST JSON Git Spotify Web API

Desmos Renderer (>500 stars)

Fun graphing calculator art tool

📅 Apr 2021 📧 kevinjycui/DesmosBezierRenderer

- Converts images to SVG, extracts Bezier curves, pushes to Desmos API as \LaTeX expressions

Python Potrace NumPy OpenCV
Flask JavaScript \LaTeX Desmos API

Practice Bot (>800 servers)

Competitive programming utility Discord bot

📅 Mar 2020 – Jul 2021 📧 kevinjycui/Practice-Bot

Python MariaDB Selenium discord.py
AWS Bash JSON

HUMAN LANGUAGES

Native English & Mandarin
Intermediate Japanese, Beginner French

EDUCATION

McGill University
Bachelor of Science Major in Computer Science

📅 2020 – 2025 📍 Montreal, QC

CGPA: 3.8/4.0

Advanced courses taken: Computer Graphics, Computer Animation, Artificial Intelligence, Intermediate Japanese Writing

Java Maven Spring C C++ OpenGL GLSL Python NumPy SymPy Unity C# .NET
Docker Bash x86 Assembly \LaTeX MS-DOS

Game Dev McGill (GDM): VP Finance (2022-2023), VP External (2023-2024)

Research Project: Audio to animation neural network (2023)

Python NumPy Jupyter Jupyter Notebook Tensorflow Unity C# .NET VMC/OSC

International Exchange (2024-2025): Waseda University, Tokyo, Japan

Took courses on Multimedia Systems, Signal Processing. Member of Waseda Computer Entertainment (WCE) circle

SKILLS

Programming & Other Computer Languages

C++ C Python C# Java JavaScript Bash Go GLSL TypeScript GDScript Lua Scala
SQL HTML+CSS Arduino x86 Assembly \LaTeX

Frameworks, Libraries, Engines, & Databases

GNU .NET Node.js Unity Godot OpenGL SDL Maven Spring React Angular Express
Flask NumPy Django Hadoop HDFS Jupyter Tensorflow MySQL MariaDB OpenCV Selenium
Bootstrap SpigotMC

Development Tools & Environment

Git GitHub Perforce Docker Jenkins Jira Lint Linux Windows MS-DOS Jupyter Notebook
Visual Studio JetBrains Vim

Cloud, Protocols, File Formats, Graphics Softwares, & DAWs

AWS DigitalOcean Nginx JSON XML YAML HTTPS SSH REST WebSocket VMC/OSC
Blender Audacity Clip Studio Paint Muscore UTAU Microsoft Excel (Advanced)

YOUTUBE CHANNEL & OPEN SOURCE

📺 **YouTube Silver Play Button (>100K subscribers)**
I run a YouTube channel covering topics in niche software, game dev, math, audio processing, etc. including video essays and tech demos. The channel has >15 million views and >180k subscribers as of 2024.
🌐 youtube.com/c/Junferno

🐙 **Open Source**
I occasionally contribute to open source projects on GitHub, such as DMOJ: Modern Online Judge

🎬 **Bad Apple!! Demoscene (>6 million views, >800 stars)**
I participate in the open internet demoscene of "Bad Apple!!" in which a black-and-white music video is programmatically played on as many different platforms as possible in creative ways
👤 [kevinjycui/bad-apple](https://github.com/kevinjycui/bad-apple)