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, including that of 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 & Writer, 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.
- Leading team of 4 programmers in discussions, roadmapping, etc.
- Performing dev-ops and tools programming to support artists, designers, and programmers
- Contributing to design, writing scripts, composing music
- Managing source control, conducting code review, creating documentation
- Managing recruitment, marketing, and production

Unity | Git | GitHub

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

EDUCATION

McGill University
Candidate for B.Sc. Major in Computer Science

📅 2020 – 2025   📍 Montreal, QC

CGPA: 3.8/4.0

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

Research Project (2023): Audio to animation neural net

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

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

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`

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`

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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`

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Development Tools & Environment

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

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

`AWS` `DigitalOcean` `Nginx` `JSON` `XML` `YAML` `HTTPS` `SSH` `REST` `WebSocket` `VMC/OSC` `Blender` `Audacity` `Clip Studio Paint` `Musescore` `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