Research Assistant for Modding Minecraft

Duration: April 30^{th} to August 6^{th} , 2023 Application deadline: April 2^{nd} , 2023

Work hours: 20 hours per week

Salary: \$17.26/hr

Supervisor: Dr. Stuart Thiel

Department: Computer Science and Software Engineering

Job Qualifications:

• Java

• GitHub

• Eclipse (IDE)

Recommended:

• Gradle familiarity

• Git familiarity

• Open Source development experience

• Minecraft Modding Experience

Responsibilities:

- Write/release 1.12, 1.13 versions of ChessMod
- \bullet Update 1.14, 1.15, 1.16 versions of ChessMod
- Write/release 1.19 version of ChessMod
- Document Minecraft Forge architectural differences across versions

Whom:

• Undergraduate students in CSSE or ECE

This posting is for a TRAC-RA position for a Concordia Student Research Assistant for a one-semester research project starting in April 2023, with an anticipated start date of Apr. 30th, 2023 and an anticipated end date of August 6th, 2023. The posting period will be from March 19th, 2023 until April 2nd, 2023.

The project, titled "Minecraft Modding: Playing with History", aims to investigate how mod architecture must evolve to support various versions of Minecraft. Specifically, the project seeks to document the changes required in the mod architecture to accommodate the changing architecture of both Minecraft and Forge through different versions. To achieve this, the project will involve producing working versions of an existing mod, ChessMod, across several older and one newer version of Minecraft using the Forge framework. ChessMod currently has nearly 10k downloads and is available for four versions of Minecraft.

The project will focus on back-porting ChessMod to version 1.12 of Minecraft while also bringing its three earliest mod versions up to date with the current 1.18 release. Additionally, a 1.19 version is expected, and the project aims to translate the experience gained to other mods used in a related and much larger SSHRC grant. This project offers a unique opportunity to gain experience in Minecraft modding, contribute to important research, and expand one's skill set in software development.

The position is paid part-time at TRAC rates of approximately \$17.26/hr, as per the current **TRAC Collective Agreement**. We expect the RA to work approximately 20 hours per week for most of the semester, which amounts to around 280 hours in total for an undergraduate student.

Interested applicants, please contact Stuart Thiel (stuart.thiel@concordia.ca), who will be supervising this position as a part-time faculty in the department of Computer Science and Software Engineering. Please submit the following:

- A one-page cover letter stating experience and how requirements are met
- Full curriculum vitae
- Names and titles of two referees along with contact information

Candidates will be contacted for a follow-up Zoom interview in the third week of April.

Applications from women, Aboriginal Peoples, visible minorities, ethnic minorities, and persons with disabilities are encouraged to further employment equity.