# Kapil Regmi

kregmi1@students.towson.edu • github.com/MaybeKapil • Baltimore, MD

#### **EDUCATION**

## Towson University | Towson, MD

Expected Graduation May 2024

B.S. - Computer Science, Software Engineering

Minor - Mathematics

- CS Coursework: Principles of Computer Organization, Data Structures and Algorithm Analysis, Data
  Communication and Networking, Software Engineering, Object-Oriented Design and Programming, Operating
  Systems, Requirement Analysis and Modeling, Software Quality Assurance and Testing, Programming Languages:
  Design and Implementation, Database Management Systems, Mobile Application Development, Web-based
  Programming, Software Project Practicum
- Math Coursework: Discrete Mathematics, Cryptography, Graph Theory, Linear Algebra, Calculus 3, Statistical Methods

### **PROJECTS**

Community Chat Website | Typescript, Postgres, HTML/CSS, AWS, Heroku, Figma, React

\*In-Progress\*

Workout Tracker Android App | Kotlin, Android Studios, Figma

\*In-Progress\*

Mutation Testing Software for Mojo | Python, Mojo

\*In-Progress\*

## Language Processor | Python

Fall 2023

- Developed a language processor for a specified grammar that comprises of three integral components: file reading, lexical analysis, and parsing.
- Implemented efficient file handling for reading source code, a lexical analyzer to tokenize programming, constructs, and a top-down, predictive, recursive descent parser.
- Integrated error reporting mechanism to enhance debugging and provide meaningful feedback to users.
- Designed with a focus on modularity, maintainability, and scalability of the language processor codebase.

## FreeCol Improved | Java

Fall 2023

- Enhanced the code quality and functionality of an existing game, FreeCol, through a systematic approach to software quality assurance and testing.
- Effectively identified and resolved issues by employing strategic prioritization methods including software profiling tools and complexity measurements.
- Validated software changes using unit testing, integration testing, and GitLab CI/CD.
- Applied Scrum practices within the team to identify, track, resolve issues, and document changes.

#### Language Translation Website | Java, JavaScript, CSS, HTML, PHP, MySQL, AWS

Fall 2022

- Developed an interactive website which allows the user to translate text from one language to another along with providing text-to-speech functionality and currency conversion.
- Implemented a login page with user authentication.
- Designed the frontend interface with a focus on a minimal design while maximizing user functionality.
- Applied agile development approach and Scrum practices within the team.

#### **SKILLS & TECHNICAL TOOLS**

Programming: Java, Python, HTML/CSS, C++, JavaScript, TypeScript, LISP, Kotlin, PHP, Golang, VBA, C, Mojo

Technologies: Git, AWS, React, Figma, Postgres, Heroku, MySQL, Subversion, Slack, Trello

Language: Fluent in Nepali