**Dongchan Lee**

**Address:** 121 University Ave. East unit 81, Waterloo, Ontario, Canada

**E-mail:** d298lee@uwaterloo.ca

**Contact No.:** +1 416 820 3001

**SKILLS and INTERESTS**

**Technical Skills:** Linux, shell script, git/github, C, Flask, JavaScript, HTML, CSS.

**Interests:** Mathematics (Abstract Algebra), information security, web application development.

**EDUCATION**

**2B at the Faculty of Mathematics, University of Waterloo Fall 2020 - Present**

* Obtained ‘Term Distinction’ at the end of every study term.
* Took advanced math courses during the first year.
* 91% Cumulative Average in the latest term.

**EXPERIENCES**

**Mandatory Military Service (REPUBLIC OF KOREA) Sep 2021 - Mar 2023**

* Assisted in maintaining and training reserve forces at a battalion.
* Performed outstanding results in both practical and theoretical assessments during major training sessions and received two citation awards from the battalion command and the division commander.

**Waterloo Experience Accelerate Program May 2021 - Aug 2021**

* Assisted the team in the website development focusing on the user-friendly responsive web design using HTML, CSS and JavaScript.

**SIDE-PROJECTS**

**Planarity Game** [*https://shinelee2001.github.io/mysite/planarity/planarity.html*](https://shinelee2001.github.io/mysite/planarity/planarity.html)

* Implemented an algorithm for generating random untangled planar graph on canvas using JavaScript with the features supporting moving nodes to untangle graph.

**File Uploader App** [*https://github.com/shinelee2001/File-Uploader*](https://github.com/shinelee2001/File-Uploader)

* Implemented file uploading API where client can upload files and view the list of those uploaded files.
* Utilized express, multer and fs for handling file exchanges between server and client and utilized cors package to meet the cross-origin-resource-policy.

**Communication App (Mobile App)** [*https://github.com/shinelee2001/UniLink*](https://github.com/shinelee2001/UniLink)

* Developed on Android Studio using Java where people post and share images, notes and comments.
* Implemented with the concept of Object Oriented Programming.
* Utilized Firebase for handling back-end side (authentication and database).

**Studying Helper App (Web App)** [*https://github.com/shinelee2001/MetaLearner-Flask*](https://github.com/shinelee2001/MetaLearner-Flask)**Jan 2024 - Present**

* Implemented studying helper application with the main feature of adding notes and displaying the notes every 1, 4, 7, and 14 days.
* Utilized Flask and SQLite for the back-end.

**EXTRA-CURRICULAR ACTIVITIES**

**Personal Website via Github** [*https://shinelee2001.github.io/mysite*](https://shinelee2001.github.io/mysite)

**Certificates**

* Microsoft Office Specialist Master

*National Technical Qualification Certificates (in South Korea)*

* Computer Specialist in Spreadsheet & Database Level-1
* Linux Master Level-1

**Penetration Testing Mar 2023 - Aug 2023**

* Practiced typical web hacking skills such as Command/SQL injection, XSS, CSRF via web application DVWA.
* Studied the structure of a database and various types of SQL injection via webhacking.kr.
* ([*https://shinelee2001.github.io/mysite/web\_hack/penetration\_testing.html*](https://shinelee2001.github.io/mysite/web_hack/penetration_testing.html)) Internally assessed scenario-based penetration tests where the target(weak) environments were brought from www.vulnhub.com.

**Chess Club Sep 2023 - Present**

* Developed a thorough and logical way of building up an idea.

**Mathematics Club Aug 2018 - Dec 2018**

* Studied logics and proof techniques that are essential in mathematics and applied them to prove various theorems on a textbook.
* Developed creativity and mathematical thinking by exploring various math-related paradoxes.
* Studied group theory in depth and explored the algorithm of RSA cryptosystem and implemented own word-to-word cryptosystem based on ElGamal algorithm using C language.