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| Juheon (John) Chu | Web design <https://juheonchu.github.io/ResponsivePortfolio/>   * [juhuhni98@gmail.com](mailto:juhuhni98@gmail.com) |  (717) 636-3611 * <https://www.linkedin.com/in/juheonchu/>|  Carlisle, PA 17013 * <https://github.com/JuheonChu> |

EDUCATION

Dickinson College Carlisle, PA, USA

Bachelor of Science in Computer Science and Mathematics Expected December 2023

*Cumulative GPA*: 3.79/4.0; *Major GPA (Computer Science)*: 3.95/4.00

*Relevant Courses*: Analysis of Algorithms, Operating Systems, Data Structure and Algorithms, Computing Abstractions, Computability and Complexity, Database Systems, Operations Research, Real/Complex Analysis, Abstract Algebra

**Honors & Awards**

* [The Forrest E. Craver Memorial Prize in Mathematics](https://www.dickinson.edu/info/20032/mathematics/243/prizes_and_awards): Awarded to a junior student exceling in mathematics
* Dean’s List: All Semesters

WORK EXPERIENCE

Reeplayer Culver City, California

Software Engineer Intern May 2022 – August 2022

* Launched 4 state-of-the-art video resolution services by providing NVIDIA Maxine API to provide AI visual effects.
* Reduced video camera noise by 80% and encoding artifacts by 55% with CUDA C/C++ to provide end-user utilities.
* Improved code coverage from 60% to 80% by modularizing Data Access Objects in Junit tests for camera functionalities.
* Contributed to redesigning the brochure site utilizing 4 AWS Services (EC 2 Instance, Cognito, Lambda, RDS).

[DNB](http://www.dnbprema.com) Prema Goyang-si, South Korea

Full-Stack Software Engineer Intern

* Accelerated customer retention by 30% by designing a user-friendly DNB brochure site with JSP, HTML, CSS, and JS.
* Revamped working process to save 8+ hours per week by modularizing program codes with Spring MVC framework.
* Developed and maintained 40+ backend end user services of websites managing 6+ databases in MySQL workbench.

RESEARCH EXPERIENCE

Assigning Students to First Year Seminar (FYS) May 2022 – Present

* Authored automated Python program with Gurobi solver to assign 660+ Dickinson freshmen to 42+ FYS courses.
* Balanced gender and international student ratios by 85% in FYS classes maintaining 16+ course capacities.
* Collaborated with Prof. Forrester in Dickinson to improve current algorithm by applying Hungarian method, improving runtime by 28%.

PROJECTS

Pokemon Database (Java, HTML/CSS) [[*https://github.com/JuheonChu/pokemonDB*](https://github.com/JuheonChu/pokemonDB)]

* Built user-friendly website to interact with 6 data sets and represent relational details of 230+ Pokemon features.
* Implemented MySQL and JDBC to construct 6 Data Access Objects and connect to 20+ backend services using JSP Servlet.

Operating System (OS) Kernel [[*https://github.com/JuheonChu/OS-kernel*](https://github.com/JuheonChu/OS-kernel)]

* Demonstrated 16-bit operating system capable of concurrent execution of 8+ open source OS prompt commands.
* Employed Low C/C++ and Bash to construct file I/O system and establish pipeline to link 4+ software to disk image.

The One Korea [[*https://github.com/JuheonChu/theOne*](https://github.com/JuheonChu/theOne)]

* Created responsive franchise-launch website with JS and HTML/CSS to assign unique URL across 2 franchise brands.
* Implemented 16 UX/UI services for admin, franchisees, and customers by connecting Datasource beans to MySQL server.
* Collaborated with 2 students to operate 500+ JSP files with Spring MVC framework, improving UX by 45%.

Nike Model Design [*https://github.com/JuheonChu/nikePractice*]

* Designed online shopping mall capable of 8+ UX services to serve as an example of NIKE with JSP and HTML/CSS.
* Performed MySQL, JS, jQuery, AJAX and JSP Servlet to fetch 700+ product and service data from 40+ HTTP web server.

LANGUAGE & SOFTWARE

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| Programming Languages: | Java, C/C++, Python, JavaScript, SQL, HTML5, CSS, CUDA |

**Software & Framework:** AWS, React, Node.js, Github, Linux, jQuery, JSP, Spring MVC, Docker, Kubernetes