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| Juheon (John) Chu | Web design <https://juheonchu.github.io/ResponsivePortfolio/>  Envelope[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 February 2024

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

*Relevant Courses*: Linear Algebra, Computability/Complexity, Database Systems, Data Mining, Large-Scale Open Source Software Development, Analysis of Algorithms, Operating Systems, Computer Organization and Architecture

**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 excelling in mathematics

SKILLS

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| Programming Languages: | Java, C/C++, Python, JavaScript, SQL, HTML5, CSS, CUDA |
| Software & Machine Learning: | AWS, MySQL, GitHub, Pytorch, TensorFlow, NVIDIA, Transformers, Docker |

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 with 4 AWS Services (EC 2 Instance, Cognito, Lambda, RDS).

[DNB](http://www.dnbprema.com) 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.
* Designed a user-friendly brochure site utilizing HTML, CSS, and JavaScript, resulting in 15% increase in monthly profits.

RESEARCH EXPERIENCE

[Automated Program for Dickinson First Year Seminar (FYS) Assignment](https://github.com/JuheonChu/DickinsonFYSAssignment) May 2022 – Present

* Authored automated Python program with Gurobi solver to assign 660+ Dickinson freshmen to 42+ seminars.
* Accomplished balancing gender and student type ratios by 85% in FYS classes maintaining 16+ course capacities.

PROJECTS

COVID-19 Infection Estimation [[*https://github.com/JuheonChu/Comp491-Transformers-TechSpike/tree/main/projects/COVID*](https://github.com/JuheonChu/Comp491-Transformers-TechSpike/tree/main/projects/COVID)]

* Constructed a deep-learning model that estimates the infection rate of COVID-19 by scanning 740 CT scans of the chest.
* Accomplished the 64% accuracy of predicting the COVID-19 infection rate utilizing the Pytorch Depp Learning library.

Pokemon Database [[*https://github.com/JuheonChu/pokemonDB*](https://github.com/JuheonChu/pokemonDB)]

* Designed a 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 a pipeline to link 4+ software to the disk image.

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

* Created a responsive franchise-launch website with Spring MVC framework to assign unique URL across 2 franchises.
* Implemented 16 UX/UI services for admin, franchisees, and customers by connecting Datasource beans to MySQL server.

CERTIFICATION

**Certified Scrum Master (CSM),** *Scrum Alliance* **Expected** **December 2023**