Unchun Yang

Contact Information

Chung-Ang University

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Research Interests

- **High-Performance Computing:** Parallel computing for scientific applications

- **Computational Science:** Developing an automated simulation and analysis software

- **Quantum Computing:** Various quantum algorithms (quantum machine learning, etc.)

Education

2018 - Present: B.S., Computer Science and Engineering, Chung-Ang University, Seoul, South Korea

Experience

Mar 2020 – Feb 2021: Research Assistant / Sungkyunkwan University

- Using high-performance computing, support materials scientists.

- Develop software to automate VASP (Vienna Ab initio Simulation Package) DFT (Density Functional Theory) calculation and analysis process.

Publications

- Joe, Minwoong, **Unchun Yang**, and Changgu Lee. "First-Principles Study of Ferromagnetic Metal Fe_5GeTe_2." Nano Materials Science, Special Issue on two-dimensional nanomaterials, 1, no. 4 (December 1, 2019): 299–303. https://doi.org/10.1016/j.nanoms.2019.09.009.

Skills

- **Software Engineering:** C, C++, Python, PHP, JavaScript, SQL (MariaDB), etc.

- **System Administration:** Linux system administration (CentOS, Ubuntu, etc.), Cisco IOS

- **Information Security:** Security engineering, Secure coding

- **High-Performance Computing:** OpenMP, OpenACC, MPI

- **Artificial Intelligence:** Fundamental machine learning algorithms

- **Languages:** English (professional working), Korean (native)