

# 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

- 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<sub>5</sub>GeTe<sub>2</sub>." 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)