

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
- **Processor Architecture:** Efficient manycore processor architecture for parallel computing

Education

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

Experience

July 2019 - Present: Independent Researcher

- 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 Fe₅GeTe₂." 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

- **Parallel Computing:** OpenMP, MPI
- **Heterogeneous Computing:** GPGPU (CUDA)
- **Computational Science:** Programming simulation software for parallel systems
- **Artificial Intelligence:** Fundamental machine learning algorithms
- **Programming / Scripting:** C, C++, Fortran, Assembly, Python, Java, SQL, Bash, Web, Android, etc.
- **System Administration:** Linux system administration
- **Information Security:** Secure coding, Linux system security management
- **Mathematics / Science:** Basic understanding of mathematics (calculus, linear algebra, etc.) and science (physics, chemistry, etc.)
- **Languages:** English (Professional Working), Korean (Native)