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Laboratory for Physical Science

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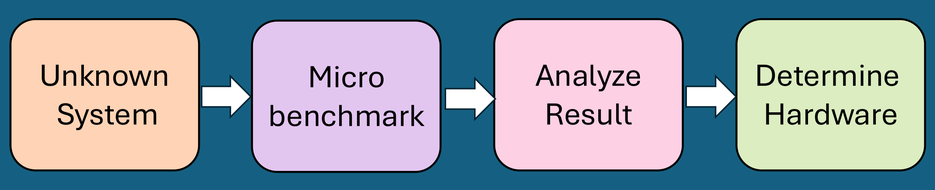
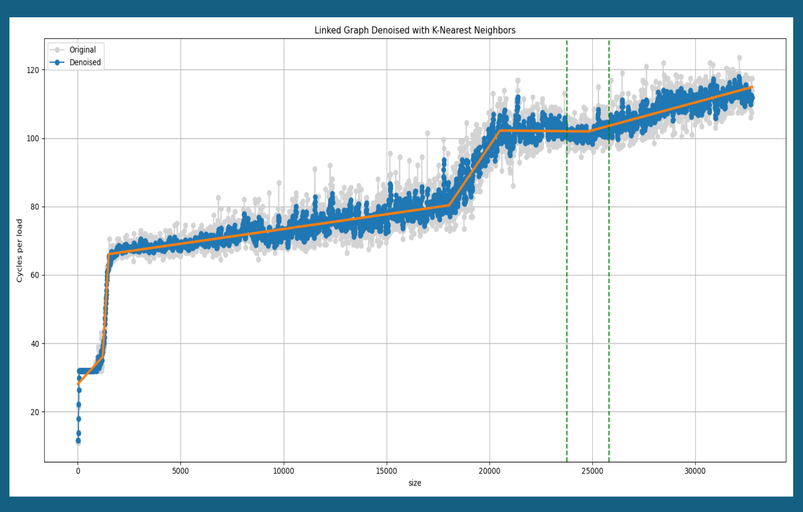
A computer hardware analysis project focused on developing micro-benchmarking software to identify computer specifications that enhance automated system modeling.

Overview

We explored and implemented micro-benchmarks designed to identify hardware components of an unknown computer system. Our exploration focused on *Operating Systems*, *Computer Architecture*, and *Data Analysis.*



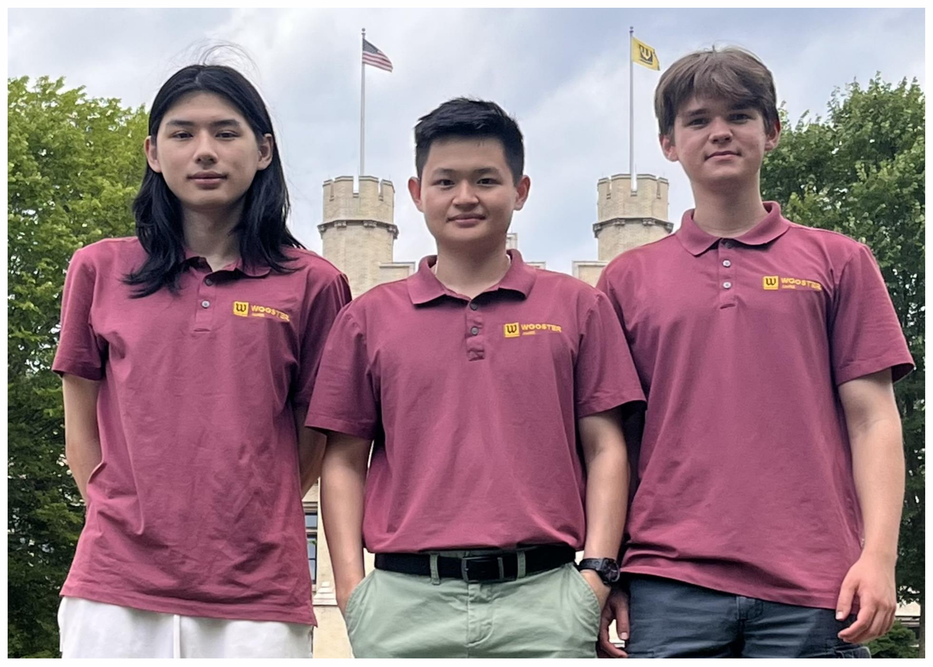
To predict hardware characteristics, we analyzed the data generated by our benchmarks to identity crucial patterns.



Client

The Laboratory of Physical Science, in partnership with the University of Maryland, brings together university, industry and government scientists to advance cutting-edge technology in three areas:

- **Solid State and Quantum Physics**
- **Advanced Manufacturing and Sensing**
- **Advanced Computing System**



Conclusion

Our results demonstrated the effectiveness of using micro-benchmarking to identify hardware components, providing a solid foundation for our client to further explore hardware analysis. The work we accomplished will assist the client in advancing automated system modeling.

Experience

- Improved our understanding of Computer Architecture and Data Analysis
- Developed technical and professional skills
- Learned effective communication habits, and formed meaningful connections with experts
- Enjoyed a welcoming work environment that nurtured academic curiosity

Acknowledgements

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