Benjamin Carver

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www.scusemua.github.io
Github: Scusemua

Education

2021–Ongoing **George Mason University**,
Computer Science, PhD.

2021–2021 **George Mason University**,
Computer Science, M.Sc..
GPA – 4/4

2016–2020 **George Mason University**,
Computer Science, B.Sc..
GPA – 4/4

Employment

Spring 2019 - Ongoing **Undergraduate/Graduate Research Assistant**, George Mason University.
Conducting research under the direction of Professor Yue Cheng.

Spring 2018 - Fall 2018 **Undergraduate Teaching Assistant**, George Mason University.
Assisted students with assignments and projects. Held review sessions for exams.

September 2016 - July 2020 **Software Developer**, BRTRC Federal Solutions.
Worked as a development team member to extend a Geographic Information Systems (GIS) desktop application using Windows Presentation Foundation and C#/.NET:
- Implemented a user interface and memory-efficient algorithms for processing and displaying GIS data.
- Optimized algorithms for creating and displaying user-defined contour lines to produce realistic terrain maps.
- Decreased application load time by a factor of five and memory footprint by 70%.
- Implemented a system for manipulating, serializing, and viewing 3D models.

June - August 2016 **Summer Intern**, BRTRC Federal Solutions.
- Worked as a development team member to extend a .NET desktop application.

Honors & Awards

May 2021 **Distinguished Academic Achievement Award**.

May 2020 **Distinguished Undergraduate Research Award**.

May 2020 **Distinguished Academic Achievement Award**.

Publications

[SOCC 2020] **Benjamin Carver, Jingyuan Zhang, Ao Wang, Ali Anwar, Panruo Wu, Yue Cheng**, *Wukong: A Scalable and Locality-Enhanced Framework for Serverless Parallel Computing*, In ACM Symposium on Cloud Computing **(ACM SoCC'20)** (AR: 35/143 = 24.4%).

[PDSW 2019] **Benjamin Carver, Jingyuan Zhang, Ao Wang, Yue Cheng**, *In Search of a Fast and Efficient Serverless DAG Engine*.

Skills

Languages Python, C/C++, Java, SQL, C#

WebD HTML/CSS, JavaScript, jQuery

Cloud AWS, GCP, IBM Cloud

Relevant Courses

C Programming, Linear Algebra, Data Structures, Operating Systems, Database Systems, Computer Architecture, Algorithms, Systems Programming, Compilers, Object Oriented Software Design, Machine Learning, Artificial Intelligence, Advanced Artificial Intelligence, Graph Algorithms, Deep Learning, Data Analytics, Mobile Development, Linear Algebra

Teaching Experience

Spring 2020 **Guest lecturer**, *CS 675 Distributed Systems*, CS@GMU.

References

Dr. Yue Cheng,
Assistant Professor,
Computer Science, George Mason University,
yuecheng@gmu.edu.