ALOK HOTA

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CAREER OBJECTIVE

Dedicated software engineer with graphics and visualization experience looking to broaden the accessibility of scalable rendering technologies to new customers and markets.

EDUCATION

PhD in Computer Science, University of Tennessee *2018*
Dissertation: "VaaS: Visualization as a Service"
Feasibility study of performing large-scale data analysis and visualization on commodity cloud services using self-organizing computation microservices.

MS in Computer Science, University of Tennessee *2017*

BE in Computer Engineering, Vanderbilt University *2013*

BS in Computer Science, Fisk University *2011*

PUBLICATIONS

Sharma, I., DeMarle, D., **Hota, A.**, Cherniak, B., Günther, J. "OSPRay Studio: Enabling Multi-Workflow Visualizations with OSPRay", VisGap 2021.

Hota, A., Huang, J., "Embedding Meta Information into Visualizations", IEEE TVCG May 2019.

Raji, M., **Hota, A.**, Hobson, T., Huang, J., "Scientific Visualization as a Microservice", IEEE TVCG Nov 2018.

Raji, M., **Hota, A.**, Huang, J., "Scalable Web-Embedded Volume Rendering", LDAV 2017. *Best Paper Award, LDAV 2017.*

Hota, A., Raji, M., Hobson, T., Huang, J., "A Space-Efficient Method for Ensemble Analysis and Visualization", EGPGV 2017.

Raji, M., **Hota, A.**, Sisneros, R., Huang, J., "Photo-Guided Exploration of Volume Data Features", EGPGV 2017.

EXPERIENCE

Intel Corporation May 2018–present
Solutions Architect & Graphics Software Engineer *Austin, TX*

- Design and architect innovative hardware and software rendering solutions for cross-industry workflows
- Customer outreach and collaboration with development of the OSPRay Studio rendering and visualization application
- Contribute to development of high performance ray tracing libraries - Open VKL and OSPRay
- Maintained OpenSWR, a high performance open-source software rasterizer integrated in Mesa

Sandia National Laboratories Summer 2016, Summer 2017
Graduate Student Intern *Albuquerque, NM*

- Development, integration, and testing of auto-vectorization method in VTK-m for x86 platforms

Intel Parallel Computing Center at Joint Institute for Computational Science Fall 2014–present
Graduate Research Assistant *Knoxville, TN*

- Integration of OSPRay into the VisIt visualization application

Advanced Computing Center for Research and Education June 2013–July 2014
Programmer *Nashville, TN*

Institute for Software Integrated Systems February 2012–May 2013
Undergraduate Student Researcher *Nashville, TN*

National Oceanic and Atmospheric Administration Summer 2011
Undergraduate Student Intern *Silver Spring, MD*

Fisk University 2009–2011
Undergraduate Student Researcher *Nashville, TN*

SKILLS

Languages	**C++**, **Python**, **C**, JavaScript, Shell scripting
Tools and Frameworks	Git, Docker, Bootstrap, ThreeJS, VisIt, ParaView, VTK, VTK-m
Applications	Blender, FL Studio, Photoshop, After Effects, Premiere