# **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 Dissertation: VaaS: Visualization as a Service

MS in Computer Science, University of Tennessee 2017

BE in Computer Engineering, Vanderbilt University 2013

BS in Computer Science, Fisk University 2011

## **PUBLICATIONS**

**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 CorporationMay 2018-presentSolutions Architect and Graphics Software EngineerAustin, TX

· Architect reference hardware and software designs for rendering solutions

- · Customer outreach and collaboration with development of the OSPRay Studio rendering and visualization application
- · Collaborate on 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**

Graduate Student Intern

Summer 2016, Summer 2017 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

Graduate Research Assistant

Fall 2014–present Knoxville, TN

· Integration of OSPRay into the VisIt visualization application

# **Advanced Computing Center for Research and Education**

Programmer

June 2013–July 2014 Nashville, TN

## **Institute for Software Integrated Systems**

**Undergraduate Student Researcher** 

February 2012-May 2013

## **National Oceanic and Atmospheric Administration**

Undergraduate Student Intern

Summer 2011 Silver Spring, MD

Nashville, TN

# Fisk University

**Applications** 

Sitver spring, mb

Undergraduate Student Researcher

2009–2011 Nashville, TN

#### **SKILLS**

Languages Tools and Frameworks C++, Python, C, JavaScript, Shell scripting

Git, Docker, Bootstrap, ThreeJS, VisIt, ParaView, VTK, VTK-m Blender, FL Studio, Photoshop, After Effects, Premiere