RECRUITING ONE UNDERGRADUATE STUDENT

FOR A

ONE-YEAR (JAN 2018 ~ DEC 2018) RESEARCH PROJECT

(EXPLORATIVE VOLUME FLOW VISUALIZATION IN VIRTUAL ENVIRONMENTS FOR BIG DATA ANALYSIS)

SPONSORED BY

PURS (PROGRAM FOR UNDERGRADUATE RESEARCH AND SCHOLARSHIP)

Applicants from Computer Science, Electrical & Computer Engineering, MSVE, Mechanical & Aerospace Engineering, Applied Mathematics, and other closely related disciplines are expected, with junior students preferred. The selected candidate will perform intensive research as well as sustainable development in SCIENTIFIC VISUALIZATION and VIRTUAL REALITY (VR) by building on a desktop package called ActiveFLOVE (Flow Visualization Environment: www.zhanpingliu.org/Research/FlowVis/Streamlines/Streamlines.htm and www.zhanpingliu.org/Research/FlowVis/Systems/ActiveFLOVE/ActiveFLOVE.htm, already developed by Dr. Zhanping Liu using C/C++ and OpenGL coupled with Microsoft Visual Studio) for visual immersive explorative data analysis, involving flow visualization, computer graphics, image processing, data analysis, and 4 kinds of VR facilities (4-wall CAVE, Microsoft HoloLens, HTC Vive, and Oculus Rift). An ideal candidate should

- hold a GPA no lower than 3.25
- and MUST participate in this project for the ENTIRE year to guarantee a success
- be highly self-motivated and have a deep passion for research
- demonstrate a strong research ability and a solid development capability (with C and C++ programming on Windows via Microsoft Visual Studio REQUIRED, with OpenGL and VR programming desired)
- address tasks in a discreet, progressive, and accordingly thorough manner
- possess great communication skills in written and oral English
- own a personal laptop running Microsoft Windows-7/-10

Below are the 1-year schedules (with a considerable period for training) & stipend rate info.

- **2018 Spring** (Jan 06 ~ April 20)
  - $10 / hour × 2 hours / day × 5 days / week × 15 weeks
- **2018 Summer** (2018.05.15 ~ 2018.07.23)
  - $10 / hour × 6 hours / day × 5 days / week × 10 weeks
- **2018 Fall** (2018.08.25 ~ 2018.12.07)
  - $10 / hour × 2 hours / day × 5 days / week × 15 weeks

Interested qualified undergraduate students are welcome to contact Dr. Zhanping Liu (Department of Modeling, Simulation, and Visualization Engineering, www.zhanpingliu.org) by sending latest CVs to z1Liu@odu.edu (with “Application for PURS-ExtActiveFLOVE --- FirstName-LastName” as the subject line of an e-mail).