Slesa Adhikari

Software Developer
+1 (256) 513-2007
1508 B Halston Circle NW, Huntsville, AL
slesa.adhikari@gmail.com
slesaad.com.np
www.linkedin.com/in/slesaad/

Skills

Languages: Python, C/C++, Javascript, C#
Graphics Programming with **OpenGL**
Image Processing/ CV using **OpenCV**
Scikit, **Numpy**, **Scipy**
ReactJS, jQuery, Sass
LaTeX , Bash Scripting, Git, Linux
Scrum/Agile methodologies, JIRA

Education

Master's in Computer Science, GPA 3.875
University of Alabama in Huntsville
2018-2020

Graduate Research Assistantship
AAUW International Master's Degree Fellowship
AAUW International Master's Degree Completion Fellowship
Thesis: *Detecting Periodic Action Patterns in Videos*

Bachelor's in Computer Engineering, 78.6%
Institute of Engineering, Pulchowk Campus
2012-2016

Full merit based undergraduate scholarship
Ncell Excellence Award, Ncell Pvt. Ltd.
Ncell Scholarship Award, Ncell Pvt. Ltd.
Graduated top 10 among 700 students

Experience

Graduate Research Assistant
Global Hydrology Resource Center, NASA/UAH
May 2019 - Present

Data processing (python, numpy, zarr, xarray) of various earth science datasets
Optimized rendering speed of 3D web visualization of those large datasets
Created a user palatable interface and experience
Created RESTful APIs and deployed serverless framework to AWS Lambda using Terraform

Cesium, Javascript Python, Numpy, Zarr, Xarray, AWS, Lambda, Terraform, HTML, CSS, Panda3D

Graduate Teaching Assistant
University of Alabama in Huntsville
August 2018 - May 2019

Grading, one-on-one tutoring of students and laboratory instruction

C, Raspberry Pi, ARM

Associate Software Developer
Logic Information System Nepal
November 2016 - May 2017

Design and implementation of data warehousing, reporting and archiving solutions for various international organizations including *Petco* and *Matahari*

Oracle, Teradata, Bash Scripting

Intern
Logic Information System Nepal
January 2016 - September 2016

Design and implementation of a Virtual Reality system that constructed a partial 3D scene from 2D image/s

C++, OpenGL, VR, Android

Projects

Video Repetition Finder Detecting periodic action patterns in videos; thesis work for Master's degree program [Python, Keras, ConvNet, OpenCV]

Unity Crowd Renderer Real-time crowd rendering (more than 10,000 3D animated instances) in Unity Game Engine with vastly improved performance (30 fps vs 4 fps) over existing tools [C#, GLSL]

Dimension223 Partial reconstruction of 3D scene from 2D image/s with VR support [C++, OpenCV, OpenGL, VR, Java, Android, Sockets]

BatSS Blind Signal Separation (separation of a set of source signals from a set of mixed signals, without the aid of information about the source signals or the mixing process) using neural networks and parallel computation in GPU [Python, Numpy, OpenCL]

Document Classification Natural Language Processing applied to the task of document classification done as a part of research work for identifying the coverage of technology news in Nepali newspapers; Naive Bayes Classifier and Support Vector Machines were explored [Python, Numpy, Scikit, NLP]

Yatra Collaborative Filtering based recommender implemented in a travel web application [GMaps, Django, Python]
Winner, *Yomari CodeCamp*, 2016

Flipped 2D platform adventure game for Android [Java, Box2D, Photoshop, Illustrator]
 Finalist, *Ncell App Camp*, 2015

Handsfree Hand gesture input tool for PC [C++, OpenCV]
Winner, *LOCUS Software Competition*, 2014

Grants/Awards

2019	AAUW International Master's Degree Completion Fellowship
2018	AAUW International Master's Degree Fellowship
2017	Ncell Excellence Award, Ncell Pvt. Ltd.
2014	Ncell Scholarship Award, Ncell Pvt. Ltd.
2012-2016	Silver Jubilee Scholarship, Indian Embassy.
2010-2012	Mahatma Gandhi Scholarship, Indian Embassy.
2016	Winner, Yomari CodeCamp, Yomari Inc.
2015	Winner, Software Competition in Open Category, LOCUS