Akshit **Arora**

🔊*"AHK-SHIHT AH-RO-RUH"* | अक्षित अरोडा

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Education

Master of Science (M.S.) Computer Science at University of Colorado, Boulder *Colorado, USA*

RELEVANT COURSEWORK: NEURAL NETWORKS AND DEEP LEARNING, DESIGN AND ANALYSIS OF ALGORITHMS *Aug '17 - Aug '19 (Exp.)*

Bachelor of Engineering (B.E.) in Computer Engineering at Thapar University, Patiala - GPA: 3.38 *Punjab, India*

RELEVANT COURSEWORK: WEB PROGRAMMING, ADVANCED DATA STRUCTURES, DATA WAREHOUSE AND DATA MINING *Jun '13 - Jun '17*

Skills

Languages: Python, C++, MATLAB, C, PHP, MySQL, LaTeX, HTML, CSS, C#

Libraries: scikit-learn, pandas, NLTK, Vuforia, Tensorflow, Twitter Bootstrap, Weka, Scrapy, BeautifulSoup, KudanAR

Frameworks: Unity 3D, Palisade Decision Tools (@RISK and Evolver), NeuLog, CodeIgniter, ImpressJS, Inquisit Lab, Adobe Photoshop, Weka

Internships

Interactive Landslide Simulator. Mentor: Prof. Varun Dutt. Springer Publication: https://goo.gl/CvEEim *Himachal Pradesh, India*

RESEARCH SCHOLAR AT APPLIED COGNITIVE SCIENCE LABORATORY, INDIAN INSTITUTE OF TECHNOLOGY (IIT), MANDI *Jun 2015 - Jul 2017*
- Developed a web-based research tool, Interactive Landslide Simulator (I.L.S.), to balance public risk perceptions and how people at risk could adapt, to and mitigate the landslides in their neighbourhood. Also developed a REST API for ILS environment in python for applying Deep Reinforcement Learning using Tensorflow.
- **PHP, HTML, CSS, MySQL, ImpressJS, Palisade Decision Tools (@RISK and Evolver), Python, VisualBasic Scripting, Monte Carlo Simulations**. Project: goo.gl/6Gh1rQ

Augmented Reality (AR) for Military Personnel. Mentor: Prof. Varun Dutt. Report: https://goo.gl/ukkhSj *Himachal Pradesh, India*

RESEARCH SCHOLAR AT APPLIED COGNITIVE SCIENCE LABORATORY, IIT, MANDI *Dec '16 - Jun '17*
- Developed search task and live battlefield task (android applications) using marker-based approach (image targets) and marker-less approach (GPS based).
- **C#, Vuforia, Unity 3D, Google Cardboard, NeuLog Sensors, Qualtrics, Inquisit Lab, ARToolkit, Wikitude SDK, KudanAR, Android Studio.**

Opinion Mining from Twitter using Python. Mentor: Prof. Maya Ramanath *New Delhi, India*

RESEARCH SCHOLAR AT DATA ANALYTICS AND INTELLIGENCE RESEARCH GROUP, IIT DELHI *May '16 - Jun '16*
- Developed heuristics to determine whether a politician supports or opposes a public policy using tweets. Used **Tweepy, Requests, Scrapy, BeautifulSoup and NLTK.**

Projects

Intelligent Virtual Assistant (Ongoing, 2017): Tensorflow Adding a skill to Amazon Alexa using Alexa Skills Kit.

Industrial Attachment Program Evaluation Portal (Capstone Project, 2016): PHP, MySQL, CodeIgniter, HTML, CSS, JS Developed a website for students and faculty of CS department for keeping track and evaluation of project semester at TU. Project Report: https://goo.gl/zZuCTv.

Amazon Reviews Sentiment Analysis (2016): Python, NLTK. Classified product reviews on Amazon's product page into positive and negative sentiments. Link: https://goo.gl/TSXihj

PDF Annotation Web Application (2015): Django, Python Deployed 'NB' project (open source pdf annotation web-app). Link: https://goo.gl/2grMQu

Room Allocation Project (2015): PHP, MySQL, Twitter Bootstrap Built an application for managing room allocation for about 1000 incoming students in the resident hall. Also built a complaint management system with it.

Image Segmentation (2015): MATLAB Implemented a research paper (Link:https://goo.gl/3vuYZT) in MATLAB. Report: https://goo.gl/fNr1fu.

Ph.D. Students Record Management System (2014): PHP, Twitter Bootstrap, MySQL Developed an online portal for maintaining Ph.D. student records and management of their URB meetings. Report:https://goo.gl/k5cv4z.

Publications and Conference Presentations

1. Learning in an Interactive Simulation Tool against Landslide Risks: The Role of Amount and Availability of Experiential Feedback. Chaturvedi P, <u>Arora A</u>, Dutt V. National Hazards and Earth System Sciences. 10.5194/nhess-2017-297. Sep 2017. **Journal Paper**.

2. Interactive Landslide Simulator: A Tool for Landslide Risk Assessment and Communication. Chaturvedi P, <u>Arora A</u>, Dutt V. Advances in Applied Digital Human Modeling and Simulation (Springer Books). 481: 231-243. Jul 2016. **Book Chapter**.

3. Interactive landslide simulator: A tool for landslide risk and damage assessment. Chaturvedi P, <u>Arora A</u> and Dutt V. Applied Human Factors and Ergonomics, Orlando, Florida, USA. Jul 2016. **Oral Presentation**.

Extra-Curricular Activities and Honors

Grader (Aug '18 - Dec '18) at Human-Centered Computing Foundations (CSCI 3002). Course Instructor: Prof. Tom Yeh, Assistant Professor, CU Boulder.

Community Assistant (Aug '18 - May '19) at Arnett Hall, CU Boulder. Responsible for organizing events at the resident hall

Awarded Travel Fellowship for presenting 3 research papers at 7th International Conference on Applied Human Factors and Ergonomics

Co-Convener (Jun '15 - Jun '16) at International Forum for Leadership and Sustainability (social start-up). Successfully organized awareness campaigns, quiz events, dog vaccination camps and creativity competitions for underprivileged students around TU's Campus.

Attended International Workshop on Machine Learning Algorithms and Data Analytics (June 2014) by IEEE chapter of Thapar University

Photography Regularly update photos at 500px (http://500px.com/akshitarora). I recently shot the Solar Eclipse from Boulder, CO (Link: https://goo.gl/L9qSU1)