AMAR MAN MAHARJAN

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Education

University of North Texas   Denton, Texas, US

PhD Candidate, Computer Science (4.0)   *Fall 2016 – Spring 2022 (expected)*
- Computer Vision and Intelligent System (CoVis) lab member
- Major research areas: Point Set Registration, Keypoint Detection and Correspondences, Computer Vision, Pattern Recognition, Machine Learning.
- Advisor: Dr. Xiaohui Yuan

Tribhuvan University (University Campus)   Kirtipur, Nepal

Master in Computer Science and Information Technology (Distinction)   *2005 – 2007*
- Thesis: "Selection of an Intermediate Representation For Program Analysis and Optimization"
- Supervisor: Prof. Dr. Shashidhar Ram Joshi

Tribhuvan University (Patan Multiple Campus)   Lalitpur, Nepal

Bachelor in Computer Science   *2001 – 2004*

Research Publications

- **Amar Maharjan**, Xiaohui Yuan, "Registration of Human Point Set using Automatic Key Point Detection and Region-aware Features (accepted)", IEEE/CVF Winter Conference on Applications of Computer Vision (WACV).

- **Amar Maharjan**, Xiaohui Yuan, Qiang Lu, Yuqi Fan, and Tian Chen "Non-rigid registration of point clouds using landmarks and stochastic neighbor embedding" Journal of Electronic Imaging 30(3), 031202 (5 January 2021). https://doi.org/10.1117/1.JEI.30.3.031202.

- **Amar Maharjan**, Xiaohui Yuan, "Point Set Registration of Large Deformation Using Auxiliary Landmarks", 2nd International Conference on Urban Intelligence and Applications, 86-98, 2020.

- L. Kong, X. Yuan, and **A. M. Maharjan**, "A hybrid framework for automatic joint detection of human poses in depth frames," Pattern Recognition, vol. 77, pp. 216–225, 2018.

Experience

Web Architect   Oct 2014 – Aug 2016

UBA Solutions Pvt. Ltd.   *Lalitpur, Nepal*
- Responsibilities: High-level architecture design of a project, deciding development tools & technologies needed for a project, lead research team, motivating team, code review and maintaining coding standard.

Sr. Software Engineer   Nov 2009 – Oct 2014

UBA Solutions Pvt. Ltd.   *Lalitpur, Nepal*
- Responsibilities: Team lead, research and development, projects supervise, documentation, coordination with project manager and system analyst.

Sr. Software Engineer   Mar 2008 – Nov 2009

Data Analysis and Software Solutions (DASS)   *Maharajgunj, Kathmandu, Nepal*
- Responsibilities: Create program designs in coordination with system analyst, project supervise and document them, based on requirements, implement the prepared design documents, create test specifications for the program being implemented and other duties as required.

Software Engineer   Jan 2008 – Mar 2008

Data Analysis and Software Solutions (DASS)   *Maharajgunj, Kathmandu, Nepal*
- Responsibilities: Based on requirements, implement the prepared design documents, create test specifications for the program being implemented and other duties as required.

Teaching Experiences

Teaching Assistant (TA)   Fall 2021 – present
Department of Computer Science and Engineering, University of North Texas   *Denton, Texas*

Teaching Fellow (TF)   Spring 2020 – Fall 2020
Department of Computer Science and Engineering, University of North Texas   *Denton, Texas*
- CSCE 4650 Introduction to Compilation Techniques.
- CSCE 2110 Foundations of Data Structures.

Teaching Assistant (TA)   Fall 2016 – Fall 2019
Department of Computer Science and Engineering, University of North Texas   *Denton, Texas*

Lecturer   2016
Department of Computer Science and Information Technology (CDCSIT), TU   *Denton, Texas*
- Extra Profession Course for .NET framework and Web programming.

Projects

SkyFonts
UBA Solutions Pvt. Ltd.   *Lalitpur, Nepal*
- Cross-platform desktop-based cloud application that installs fonts from different service providers (like google, fonts.com, linotype, myfonts) into the user's machine.
- Main features include auto font installation, removal, login-logout service, font searching

FontSquare
UBA Solutions Pvt. Ltd.   *Lalitpur, Nepal*
- iOS mobile application that installs Google fonts into the mobile device. It has features like searching fonts, searching fonts by categories, selecting fonts, installing fonts, removing fonts, show detail font information etc.

iManageProject   2010 – 2012
Data Analysis and Software Solutions (DASS)   *Maharajgunj, Kathmandu, Nepal*
- Online web application for project management. Visual Studio 2010 as main IDE using C# as programming language. MsSql Server 2008 as backend, 2010.
- Features: Login system, create projects, to-do lists, milestones, dashboard, writeboard, time tracking, chatting.

Customer Relationship Management (CRM)   2009 – 2010
Data Analysis and Software Solutions (DASS)   *Maharajgunj, Kathmandu, Nepal*
- Web application using Visual Studio 2008 using VB as programming language in DASS Pvt. Ltd. (CarThink, USA). Backend in MSSQL Server 2005. Features: Login system, Email system, Searching facilities, Reports etc.

Reliability And Monitoring Program (RAMP)   2008 – 2009
Data Analysis and Software Solutions (DASS)   *Maharajgunj, Kathmandu, Nepal*
- Desktop database application using Visual Studio 2005 using C# as programming language in DASS Pvt. Ltd. (A J Walter Aviation, UK).
- Features: Data entry, update, deletion, search. Showing and coloring in data grid view etc.

Reliability And Monitoring Program (RAMP)   2008 – 2009
Data Analysis and Software Solutions (DASS)   *Maharajgunj, Kathmandu, Nepal*
- Embedded programming using C in DASS Pvt. Ltd, (Tietech, Japan).
- Maintained modules of NVR. (http requests & response, formatting & detecting disks).

Computer Skills and Training

Languages: Python, Matlab, C/C++, C#, Objective-C/C++, Java, SQL, R
Web programming: ASP.NET, ASP.NET MVC, PHP, JavaScript
Human Languages: English, Nepali, Newari, Hindi
Developer Tools: Microsoft Visual Studio, Jupyter Notebooks, Git, VS Code, Xcode, Eclipse

Honors and Awards

Multicultural Scholastic Award Program (MSA): Outreach Program Award 2017-2018, UNT Office of Outreach, University of North Texas, Denton, Texas, US

UNT-International Education Scholarship: 2018/19, UNT International office, University of North Texas, Denton, Texas, US

International Student Texas Public Education Grant (TPEG): 2018-19, University of North Texas, Denton, Texas, US

UNT-International Education Scholarship: 2019/20, UNT International office, University of North Texas, Denton, Texas, US

International Student Texas Public Education Grant (TPEG): 2019-20, University of North Texas, Denton, Texas, US

International Student Texas Public Education Grant (TPEG)-2019-20, University of North Texas, Denton, Texas, US

Porter-Evans Scholarship: 2020-21, University of North Texas, Denton, Texas, US

Volunteer Experiences

- Mentor, Mark Cuban AI Bootcamp, UNT, 2020.

- Advisor, Nepalese Student Association at University of North Texas (NSA-UNT), University of North Texas (Jun 2019 – present).

- President, Nepalese Student Association at University of North Texas (NSA-UNT), University of North Texas (Jul 2018 – Jun 2019).

- Vice President, Nepalese Student Association at University of North Texas (NSA-UNT), University of North Texas (Sep 2017 – Jul 2018).

- Orientation Leader, UNT-International Undergraduate, Fall 2018.

- Orientation Leader, UNT-International Undergraduate, Spring 2018.

- Preview Guide, UNT Preview, Spring 2019.

- Preview Guide, UNT Preview, Spring 2017.

- Volunteer, Monotype & UBA Helping Hands for Earthquake Victims (May 2015 – May 2015).

  - Cause Disaster and Humanitarian Relief.
  - 2015 Sharing food and basic materials to build houses to the earthquake victims after massive earthquake (April 25, 2015) in locations: Dalchoki, Nibuwataar, Kipulcha in Nepal under the program: Monotype & UBA Helping Hands For Earthquake Victims.

Conferences and Tech Summit

- 2nd International Conference on Urban Intelligence and Aplications, Online Hefei, China, 2020.

- 2015 Invited and participated in Monotype Tech Summit-2015.