

Ashwini Naik

PhD student at Electronic Visualization Laboratory at University of Illinois at Chicago.
Currently conducting research on in-situ analysis of conversations in mixed and virtual reality along with research in visualization of complex scientific datasets.
Diverse experience with scripting, programming, testing, troubleshooting, optimization and debugging.

HIGHLIGHTS

Virtual/ Mixed Reality

Data Visualization

Human Subjects Research

Unity/C#

Education

University of Illinois at Chicago
PhD in Computer Science

Jan 2017 – Expected 2023
CGPA 3.7

University of Illinois at Chicago
Master of Science in Computer Science

Aug 2009 – Jul 2011
CGPA 3.12

R. N. S. Institute of Technology, Bangalore, INDIA
Bachelor of Engineering in Information Science and Engineering

Sep2003 – Jul 2007
68.84 %

Relevant Coursework

Computer Graphics, Game Development, Computer Animation, User Interface Design, Visual Data Science, Visualization and Visual Analytics, Advanced Algorithms

Technical Skills

Languages	Python, JavaScript, TypeScript, C# , C, Processing, GLSL
Web Design	HTML, JavaScript, CSS, Bootstrap, jQuery
Libraries and SDKs	D3.js, Three.js, React, Unity , Leap Motion, Open GL, CUDA, Vuforia, VRTK
Scripting	JavaScript, Python
Devices	HoloLens 1 & 2, Quest 1 and 2, HTC Vive, Magic Leap, Leap Motion, Oculus Rift
Databases	MySQL, Oracle 10g, SQL Server 2005/2008, Mongo dB (beginner)
Versioning	GitHub
ML/DL	Python, sklearn, nltk, keras, matlab, AWS

Experience

Epsilon Data Management LLC

May 2022 – Aug 2022

PhD Research Internship

- Conducted research on Macro Path to Purchase - Event Sequences.
- Implemented a new visualization component on a Peta Byte-level data analysis system
- Created interactive / responsive web components using state-of-the-art UI design principles
- Created api routes to access data for visualization component.

University of Illinois at Chicago

Jan 2017 - Now

Graduate Student, Electronic Visualization Laboratory

- Teaching Assistant for CS 428 – **Virtual, Augmented and Mixed Reality**; CS 425 Computer Graphics; CS 211 Programming Practicum II
- Conduct research on analysis of conversations using **Mixed reality** in **smart collaborative** environments
- Conduct research on **Visualization** of Dynamic Communities of Brain Networks using D3.js and Three.js
- Created V-NeuroStack application showing dynamic communities using 3D point cloud in three.js.
- Conduct research on a Machines Assisting Recovery from Stroke
- Implemented a game for Stroke Rehabilitation with Leap Motion device.
- Co-taught AR in journalism course at the Department of Communication, UIC

Scientific Games

Jul 2012-Dec 2016

Senior Test Engineer

- Set up Engineering Customer Support team for India location
- Created training plans and trained associate test engineers
- Worked and resolved issues from the field that improved revenue in several casinos across jurisdictions
- Carried out team lead duties for ECS India

Olenick and Associates Client: Chicago Mercantile Exchange

Jul 2011 - Mar 2012

Automation Engineer

- Enhanced the existing Automation framework
- Maintained the automation testing framework for EOS Trader – CME Globex Trading Application
- Performed Acceptance and Regression Tests

Birlasoft Ltd. Bangalore, India;

Danbury, CT, USA Client: General Electric – Commercial Finance)

Aug 2007 – Mar 2009

Software Engineer

- Worked in full life cycle (SDLC) in various stages of the project including analysis, user acceptance testing, SQL data mining and defect tracking
- Provided troubleshooting in various domains across multiple Siebel applications including Oracle databases (Production Servers)
- Coordinated with onsite and offshore teams and handled the onsite workload while being the only resource

Projects

Website: <https://sites.google.com/view/ashwinigprojects/>

Github: <https://github.com/anaik12>

Publications

- IEEE Gem 2019 - Virtual Slot Games for Rehabilitation Exercises - <https://ieeexplore.ieee.org/document/8811546>
- Journal of Neuroscience Research 2022 - V-NeuroStack: Open-source 3D time stack software for identifying patterns in neuronal data - <https://onlinelibrary.wiley.com/doi/full/10.1002/jnr.25139>
- Neuroscience (SfN) 2019 - V-NeuroStack: 3-D time stacks for finding patterns in spontaneous activity of neurons in mouse brain slice <https://www.abstractsonline.com/pp8/#!/7883/presentation/49635>