

Omkar Chekuri

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SUMMARY

I am a current PhD candidate in the school of computer science in the university of Oklahoma working the field of data visualization.

EDUCATION

University of Oklahoma, Norman, Oklahoma, USA

- Ph.D. Candidate in Computer Science Aug 2018 – Present
Research areas: Information Visualization
Advisor: Dr. Chris Weaver
- M.S. in Data Science and Analytics Jan 2016 – May 2018
Cumulative GPA: 3.5 / 4.0

Jawaharlal Nehru Technological University, Kakinada, Andhra Pradesh, India

- Bachelor of Technology in Mechanical Engineering Aug 2008 – Jun 2012
Cumulative GPA: 3.3 / 4.0

EXPERIENCE

University of Oklahoma, Norman, Oklahoma, USA

Graduate Teaching Assistant

Aug 2020 – Present

Instruct the python programming lab, conduct office hours, and assist the faculty in grading.

Graduate Research Assistant, Mentor: Dr. Chris Weaver

Aug 2019 – May 2019

Develop a suite Gestures for Direct Manipulation of Data: learning about approaches and systems of coordinated multiple view visualization and developing a gallery of gesture designs.

[Interactive Gesture-Based Data Manipulation and Visualization for Exploratory Learning and Research](#)

Development of Coordination Architecture for D3: (C4D3) is a framework for building coordinated multiple views (CMV) using view level abstractions provided on top of D3.js library

[C4D3\(Coordination for Data Driven Documents\)](#)

Graduate Research Assistant, Mentor: Dr. Sridhar Radhakrishnan

May 2018 – Dec 2018

Develop and dispatch a mobile system for the transit providers managed by Oklahoma Department of Transportation.

Cloud Nine Development LLC, Norman, Oklahoma, USA

Data Analytics Intern, Mentor: Dr. Sridhar Radhakrishnan

Jan 2018 – May 2018

Developed custom analytics dashboard using R studio to forecast business using time series models by using metrics gathered through google analytics service.

Study the business problem and make recommendations on the various key performance indicators to collect using google analytics.

Construction Development Company, Doha, Qatar

SAP CMMS Engineer

Mar 2013 – Feb2015

Worked with various clients in the EPIC (Engineering, procurement, installing and commissioning) projects in coordinating the project, planning, and implementing the asset management system, data management and preparation of project status reports using Excel.

Aker Solutions, Kakinada, Andhra Pradesh, India

Mechanical Engineer

Jun 2011 – Jan 2013

Performed general and preventive maintenance of equipment. Prepared M&L (maintenance and logistics) reports and maintained records of safety checks conducted on a regular basis.

Andhra Pradesh Paper Mills Limited, Rajahmundry, Andhra Pradesh, India

Engineering Intern

Aug 2011 – Mar 2012

Assisted the operations team in planning the supply chain routes and improvement of the efficiency of the paper production.

RELEVANT PROJECTS

Solving Dynamic Perfect Mazes Using Reinforcement learning

Implemented Q- Learning and a novel modified version of SARSA called Multi Agent SARSA to solve dynamically generated Perfect Mazes

2.5D platformer game using LWJGL library

Implemented a fully functional 2.5D platformer game with animation, collision detection, shaders, a particle system, and some simple physics.

Distributed Sudoku Solver using Docker

Implemented a Distributed sudoku solver in Docker where each 9x9 sudoku matrix is split into multiple small 3x3 matrices and each client initially stores a 3x3 matrix. The clients should only communicate with neighboring clients and solve the sudoku puzzle.

AWARDS

PhD Recruitment Excellence Fellowship - College of Engineering, University of Oklahoma

TRAINING

CITI (Collaborative Institutional Training Initiative) for conducting Human Research

POSTERS

Omkar Chekuri, and C. Weaver, "C4D3: A Software framework for building coordinated web visualizations",
University of Oklahoma, 2020

TECHNICAL SKILLS

Programming Languages

Proficient: JavaScript, Python, HTML/CSS, Java, SQL, R

Familiar: C, C#, C++

UI and Visualization Libraries/Frameworks

D3.js, Improvise, React

Design Tools

AUTOCAD, CATIA

LEADERSHIP

Member, Graduate Student Community at University of Oklahoma

Member, Data Science and Analytics Association at University of Oklahoma

Member, Human Factors and Ergonomics Society at University of Oklahoma

Former Cadet at University of Oklahoma ARMY ROTC