Gowtham Kuntumalla

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EDUCATION

University of Illinois at Urbana-Champaign (UIUC)

Master of Computer Science. GPA: 4.0/4.0

Online 2021 – 2023

University of Illinois at Urbana-Champaign (UIUC)

Master of Science, Mechanical Engineering. GPA: 3.9/4.0

Champaign, US

2018 – 2020

Indian Institute of Technology (IIT) - Bombay

Bachelor of Technology. Mechanical Engineering, Computer Science. GPA: 9.3/10.0 (Top 5%)

Mumbai, India

2014 - 2018

SKILLS

- Programming: Python, C/C++, Linux Shell, PHP, SQL, JavaScript, MATLAB, HTML, LATEX, Git, OpenCV, BLE
- Misc.: Google Cloud, Data Analytics, SolidWorks, ANSYS, AutoCAD, Six Sigma (Green Belt)

Professional Experience

Forest Creek Capital LLC

Dallas, US

Operations Research Analyst, Investment Management & Data Science

June 2020 - Current

- Develop automated (using Python, PHP and machine learning techniques among others) and manual strategies for trading in commodity financial markets
- o Perform portfolio construction, risk management using proprietary algorithms, large scale databases and cloud computing

Uber Technologies Inc.

San Francisco, US

Mfg. Engineering Intern, New Mobility Division - Software, Data Analytics & Business Modelling

May - Aug 2019

- o P1: Programmed software (C++, Embedded Linux) for IoT on JUMP e-vehicles to interface Bluetooth with sensors
- o P2: Analysed large datasets to establish GPS accuracy specifications for next-generation IoT device
- **P3:** Proposed a new operations model to radically improve unit economics with potential improvements of \$60 million (executed project out of sheer interest)

Washington University in St.Louis

St.Louis, US

Summer Research Intern, Department of Energy and Chemical Engineering - Scientific Computing

May - Jul 2017

- Performed literature review on fractals, gelation and wrote C++ programs for simulating this phenomenon
- Designed a protocol to run our algorithm and process Terabytes of data on high-performance computing (HPC) cluster
- o Received a fully funded return offer for the Ph.D. program for excellent progress

UIUC & IIT Bombay

Urbana & Mumbai

Teaching Assistant, rated excellent in Spring 2019 - Teaching and Mentoring

Feb 2017 - May 2019

 Conducted tutorials, graded examinations & mentored students in courses: Senior Design project, Heat Transfer lab, Engineering Mechanics and Calculus 2 (Differential Equations)

IIT Bombay Mumbai, India

Technical Manager, Student Council of Hostel 4 - Elected Post, Led a Team of 4

Apr 2016 - Mar 2017

- \circ Played the instrumental lead role in achieving the coveted $1^{st}/16$ position in intra-college annual general championship
- o Awarded Color and Special Mention for significant contribution to the development of hostel culture

ACADEMIC PROJECTS

Metal Polymer Hybrid Heat Exchanger System

Aug 2018 - Dec 2019

Adviser: Prof.Sanjiv Sinha, UIUC

- o Conceptualised the design stage and spearheaded the execution of manufacturing and testing plan of action
- o Applied for a US Utility Patent; co-authored articles published in ASME, IJHMT and other reputed journals

Particle Image Velocimetry (PIV)

Apr 2016 - Jun 2016

Programming Project, Guide: Prof.Amit Agrawal, IIT Bombay - Scientific Computing

o Implemented software (C++, MATLAB) to digitally evaluate flow velocity using a cross-correlation FFT routine