

Gowtham Kuntumalla

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EDUCATION

- **University of Illinois at Urbana-Champaign** **Champaign, USA**
Master of Science in Mechanical Engineering. GPA: 3.9/4.0 August 2018 – Jan 2020
- **Indian Institute of Technology-Bombay** **Mumbai, India**
Bachelor of Technology. Major in Mechanical Engineering, Minor in Computer Science. Top 5% Aug 2014 – July 2018

SKILLS

- **Programming :** Python, C/C++, Linux Shell, SQL, MATLAB, HTML, \LaTeX
- **Software:** SolidWorks, ANSYS Mechanical, AutoCAD, MS Office, JMP (Design of Experiments)
- **Misc.:** Product Management, Team Leadership, Rapid Prototyping, Six Sigma (Green Belt), Data Analytics, Investing

PROFESSIONAL EXPERIENCE

- **Uber Technologies Inc.** **San Francisco, USA**
Engineering Intern, New Mobility Division – Software, Data Analytics & Business Modelling May – August 2019
 - **P1:** Wrote software for the Internet of Things (IoT) device on JUMP vehicles to process Bluetooth low energy (BLE) signals from sensors on e-vehicles. *Languages used: C++, Python, Embedded Shell Script*
 - **P2:** Wrote SQL queries to establish specifications for GPS accuracy in the IoT device
 - **P3:** Designed experiments, electronics and data collection platform for a project on characterisation of vehicle brakes
 - **P4:** Proposed a new operations model to improve unit economics with potential improvements of \$60 million
- **Washington University in St.Louis** **St.Louis, USA**
Summer Research Intern, Department of Energy and Chemical Engineering – Scientific Computing May – July 2017
 - Undertook comprehensive literature review on fractals, aggregation processes and designed a protocol for conducting computer simulations on high performance computing (HPC) cluster. *Languages used: C++ , Bash*
 - Analysed effects of change in defining parameters like volume fraction on kinetics of the sol to gel transition
- **Teaching Assistant** **Urbana & Mumbai**
UIUC & IIT Bombay, ranked as excellent in Spring 2019 Feb 2017 – May 2019
 - Teaching Assistant for the courses: Heat Transfer Lab, Statics, Engineering Mechanics and Differential Equations
- **Techno-Managerial Role** **Mumbai, India**
Technical Councillor, Student Council of Hostel 4, IITB – Elected post, Led a team of 4 April 2016 – Mar 2017
 - Played the instrumental lead role in achieving the coveted **1st/16** position in intra-college annual general championship
 - Awarded Color and Special Mention for significant contribution to the development of hostel culture

ACADEMIC PROJECTS

- **Metal Polymer Hybrid Heat Exchanger System** **Aug 2018 – April 2020**
Adviser: Prof.Sanjiv Sinha, UIUC. Funded by DOE, US Govt. - Design and Manufacturing
 - Conceptualised the design stage and spearheading the execution of manufacturing plan of action
 - **Kuntumalla G et al.**, Joining techniques for novel metal polymer hybrid heat exchangers, proceedings of IMECE 2019, ASME, vol 2, 10621 - *accepted for publication*
 - **Co-author**, Materials-to-device design of hybrid metal-polymer heat exchanger tubes for low temperature waste heat recovery, IJHMT 2019, 143 (2019): 118497
- **Particle Image Velocimetry (PIV)** **April – June 2016**
Programming Project, Guide: Prof.Amit Agrawal, IIT Bombay - Scientific Computing
 - Implemented a computer code on C++ to perform the 2D digital evaluation of flow velocity using FFT routine of Cross Correlation technique
- **Mechanical Team Member, PRATHAM** **Jan – Oct 2016**
Student Satellite Team, IIT Bombay - Nano-Satellite Mechanical Analysis
 - Analyzed and verified (modal,static structural) integrity of satellite components under various dynamic which the satellite may experience during operation in orbit