

Gowtham Kuntumalla

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EDUCATION

- **University of Illinois at Urbana-Champaign** **Champaign, US**
Master of Science, Mechanical Engineering. GPA: 3.9/4.0 2018 – May 2020
- **Indian Institute of Technology-Bombay** **Mumbai, India**
Bachelor of Technology. Mechanical Engineering, Computer Science. GPA: 9.3/10.0 (Top 5%) 2014 – 2018

SKILLS

- **Programming** : Python, C/C++, Linux Shell, SQL, JavaScript, MATLAB, HTML, \LaTeX , Git, OpenCV, BLE
- **Technical**: 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, US**
Engineering Intern, New Mobility Division – Software, Data Analytics & Business Modelling May – Aug 2019
 - **P1:** Programmed software (C++, Embedded Linux) for IoT on JUMP vehicles to interface Bluetooth with sensors
 - **P2:** Wrote SQL queries 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 – July 2017
 - Wrote C++ programs for simulating the Gelation phenomenon and process Terabytes of simulation data!
 - Designed a protocol to run our algorithm and process Terabytes of data on high-performance computing (HPC) cluster
 - Received a return offer for the Ph.D. program for excellent progress
- **UIUC & IIT Bombay** **Urbana & Mumbai**
Teaching Assistant, ranked as excellent in Spring 2019– Teaching and Mentoring Feb 2017 – May 2019
 - Conducted tutorials & graded examinations for Heat Transfer Lab, Engineering Mechanics and Calculus 2
- **IIT Bombay** **Mumbai, India**
Technical Manager, Student Council of Hostel 4 – 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
 - **Co-author**, Materials-to-device design of hybrid metal-polymer heat exchanger tubes for low temperature waste heat recovery, IJHMT 2019, 143 (2019): 118497
 - Applied for a **US Utility Patent**; co-author in multiple other journal papers and conference articles
- **Particle Image Velocimetry (PIV)** **April – June 2016**
Programming Project, Guide: Prof.Amit Agrawal, IIT Bombay - Scientific Computing
 - Implemented software (C++, MATLAB) to digitally evaluate flow velocity using FFT routine of Cross Correlation
 - It is 25% faster than similar programs available on the market.
- **Mechanical Engineer, PRATHAM** **Jan – Oct 2016**
Student Satellite Team, IIT Bombay - Nano-Satellite Mechanical Analysis
 - Analyzed structural integrity of satellite under various dynamic loads experienced in orbit. We launched it successfully on a PSLV rocket built by ISRO