# Gowtham Kuntumalla

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## EDUCATION

- **University of Illinois at Urbana-Champaign (UIUC)** — **Champaign, US**
  *Master of Science, Mechanical Engineering.* **GPA: 3.9/4.0** — *2018 – 2020*
- **Indian Institute of Technology (IIT) - 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, PHP, SQL, JavaScript, MATLAB, HTML, LaTeX, Git, OpenCV, BLE
- **Technical:** Google Cloud, SolidWorks, ANSYS, AutoCAD, JMP (Design of Experiments)
- **Misc.:** Project Management, Team Leadership, Rapid Prototyping, Six Sigma (Green Belt), Data Analytics, Value Investing

## PROFESSIONAL EXPERIENCE

- **Forest Creek Capital LLC** — **Dallas, US**
  *Quantitative Analyst - Trader,* **Investment Management & Data Science** — *June 2020 – Current*
  - Develop automated (Python, PHP) and manual quantitative strategies for trading in commodity financial markets
  - Perform portfolio construction, risk management using proprietary algorithms, large scale databases and cloud computing

- **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 and analysed large datasets to establish GPS accuracy specifications for next-gen 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
  - Received a 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

- **IIT Bombay** — **Mumbai, India**
  *Technical Manager, Student Council of Hostel 4* – **Elected Post, Led a Team of 4** — *Apr 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 – Dec 2019**
  *Adviser: Prof.Sanjiv Sinha, UIUC. Funded by DOE, US Govt.* - **Energy Systems**
  - Conceptualised the design stage and spearheaded the execution of manufacturing and testing plan of action
  - Applied for a **US Utility Patent**; co-authored articles published in ASME, IJHMT and other reputed journals

- **Particle Image Velocimetry (PIV)** — **Apr – Jun 2016**
  *Programming Project, Guide: Prof.Amit Agrawal, IIT Bombay* - **Scientific Computing**
  - Implemented software (C++, MATLAB) to digitally evaluate flow velocity using a cross-correlation FFT routine

- **PRATHAM Student Satellite** — **Jan – Oct 2016**
  *Mechanical Engineer, IIT Bombay* - **Nano-Satellite Mechanical Analysis**
  - Analysed structural integrity of satellite under various dynamic loads experienced in orbit. We launched it successfully on a PSLV rocket built by ISRO