Campus Address	**Ajay Sekar Chandrasekaran**	**Permanent Address**
610, Purdue Mall	Ajayc1160@gmail.com	3/15,,S.I.P Colony Extension,
West Lafavette, IN 47907	(765) 637-6513	Nanganallore, Chennai 61

EDUCATION

Purdue University, College of Engineering   **West Lafayette, IN**
Master of Science in Mechanical Engineering   May 2020
Concentration in Thermal and Fluid Sciences

P.S.G College of Technology   Cumulative GPA: 3.62/4   **Coimbatore, India**
Bachelor of Science in Mechanical Engineering   June 2016

SKILL SETS

CREO parametric, Auto Cad, ANSYS CFX, ANSYS Fluent, ANSYS ,Cantera, Open Foam, Python, Converge CFD, MATLAB, SAP, ABAQUS, Autodesk CFD,ESS

PROFESSIONAL EXPERIENCE

Schaeffler India Pvt Ltd   **Hosur, India**
Executive Engineer   Aug 2016 – Feb 2018
- Developed and designed a new cover for TATA Motors using CREO and performed structural simulation using ANSYS
- Validated ANSYS values with experimental results and fabricated a new cover for trial
- Performed layout study and functional tests of newly produced cover resulting in savings of $10,000
- Determined the effect of mechanical and thermal load on torque, clamp load and friction surfaces of clutch through ANSYS
- Validated ANSYS values using experimental data resulting in savings of £2,500 to £5,000

Danfoss Industries India Pvt Ltd   **Chennai, India**
Research Assistant Intern   Dec 2015 – May 2016
- Investigated performance of heat sink with heat pipes for cooling of electronic enclosures using ANSYS FLUENT & CFX
- Optimized dimensions of heat sinks using taguchi method; reduction of experimental costs by 35%

PSG College of Technology   **Coimbatore, India**
- Studied the performance of hybrid solar cells using GaSnIn coolant and compared it with that of air, water using ANSYS
- Improved thermal, exergy and electrical efficiencies of system by 12%, 23% and 11% respectively

Coursework Projects
- Developed codes to solve steady and transient states of 2D heat conduction equation using Gauss-Siedel,Jacobi and Successive Over Relaxation methods with matlab
- Developed code using matlab to generate mesh & simulated flow of fluid through pipe using openfoam for symmetric and wedge boundary conditions
- Characterized emissions of UHC, soot and NOX on CAT3410 engine for 2 different piston designs using converge CFD & studied their emission results, power and mean effective pressure values
- Developed code using python to reduce species for 1D combustion mechanism; calculated its ignition delay and flame speed using cantera

LEADERSHIP EXPERIENCE

Schaeffler India Pvt Ltd   **Hosur, India**
Idea Coordinator/Events Committee Member   Aug 2016 – Feb 2018
- Collaborated cross functionally to facilitate group of 25 people per shift in idea management & motivated them to submit new ideas for improvements for improvements in manufacturing process; improved idea participation rate by 15%
- Developed systematic plan to overcome lag in processing of ideas submitted; accomplished reduction of idea lags by 50%
- Identified strategic priorities and guiding strategy in organization of cultural and sports events such as Fun Day, Annual day and Schaeffler India Cricket League; helped to build team spirit within employees & served as an entertainment
- Administered a group of 60+ people at Schaeffler India Cricket league in overseeing event planning, organizing and setups

PSG College of Technology   **Coimbatore, India**
Events Coordinator   May 2015 – June 2016
- Oversaw logistics and purchasing for conducting workshops for group of 30 students to help with teaching students CFD

Maker Summit, IIT Madras   **Chennai, India**
Team Member   Jan 2016
- Delegated roles and responsibilities to group of 5 members to execute a screw jack principle based idea into real product
- Presented working of product to a group of 6 deans, executive members, faculty and 16 audiences

HONORS

- Awarded merit certificate for securing rank in top 10 percentile of class during sophomore year at PSG College
- Awarded "Man of Learning Culture" award for being enthusiastic towards learning at Schaeffler India Pvt Ltd