

NISHANT MANGESH JALGAONKAR

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EDUCATION	University of Michigan, Ann Arbor, Michigan	Sep '17 – Apr '19
	<ul style="list-style-type: none">• Master of Science in Engineering (M.S.E) Mechanical Engineering (Design) [GPA – 4.0/4.0]• Member of Tau Beta Pi (Top 20% of Engineering) and Diversity, Equity, and Inclusion student advisory boards• Studied Mechatronic Systems Design, Design for Manufacturing (DFM), Sensors & Intelligent Systems	
	National University of Singapore (NUS), Singapore	Aug '10 – May '14
	<ul style="list-style-type: none">• Bachelor of Engineering (B.E) in Mechanical Engineering, Honors• Studied MBA courses on Business Innovation & Business Strategies at Tel Aviv University	
SKILLS	<p>Engineering Design: Solid Works (Certified Associate), Autodesk Fusion 360, AutoCAD, NX, Creo Parametric</p> <p>Simulation: LabView + myRio, Solid Works Simulation, ANSYS (COMSOL), Fusion 360 (topology optimization)</p> <p>Programming: Matlab + Simulink, C, Python, CNC, MS Office VBA, R (Data Analysis)</p> <p>Fabrication: 3D Printing (FFF, SLA, Multi-Jet), Laser Cutting (CO2), CNC Mill (3 Axis), Basic Machine Shop (Lathe)</p>	
WORK EXPERIENCE	Student Engineer at Proctor & Gamble Robot/Cobot Multidisciplinary Design Project	Jan '18 – Dec '18
	<ul style="list-style-type: none">• Designed custom compliant gripper using poly-jet printing as end of arm tool to handle delicate paper products• Programmed robot motion for Universal Robotics UR-10 for automating quality assurance and reducing cycle time• Researched near-term robot application technologies & manufacturing quality assurance processes• Will develop custom testing methodologies and perform industry standard validation process in Fall 2018	
	Engineering Design Consultant at uKosmos LLC, USA	Jun '18 – July '18
	<ul style="list-style-type: none">• Designed and 3D printed fixtures and guides for PDMS chip manufacturing that increased throughput by 3X times	
	Design Engineer at Time Technoplast Ltd., India	Sep '16 – Mar '17
INTERNSHIP	<ul style="list-style-type: none">• Designed composite leaf spring suspension end brackets to reduce weight by 20%, including engineering analysis• Resolved production machinery issues and improved production quality for new mudguard for MCV and HCV• Ensured compliance of finished products with QC criteria and DVP, including DFMEA analysis and GD&T	
	Fabrication Studio Manager at Yale-NUS College, Singapore	Jan '15 – Jun '16
	<ul style="list-style-type: none">• Oversaw the procurement and deployment of \$150k worth of equipment for the fabrication studio• Conducted Risk Assessment (RA) study for the wood working shop and fabrication lab, as part of the RA team• Designed and implemented equipment training and workshops on digital fabrication for 100+ students and staff	
	Graduate Facilitator at Center for Socially Engaged Design (C-SED), USA	Aug '18 – Apr '19
	<ul style="list-style-type: none">• Designed custom curriculum and workshops on front end design concepts such as prototyping and user testing• Supported course project fabrication, in collaboration with faculty, in the C-SED machine shop	
TECHNICAL PROJECTS	Engineering Intern at Sol-Chip Ltd., Israel	Feb '13 – Jul '13
	<ul style="list-style-type: none">• Developed 10+ applications for use with the Sol-Chip solar cell for client demonstrations and exhibitions• Developed experiments for testing performance parameters of the solar cell to improve weather performance	
	Design of Novel Biofilm Carrier Media for Bioreactors (An-MBR) – Patent Pending	Sept '17 – Apr '19
	<ul style="list-style-type: none">• Designed and 3D printed a novel carrier geometry with multiple flow paths for optimized biofilm WW treatment• Researched application of An-MBR in waste water (WW) treatment, and the role of biofilm in treatment	
	Design of Novel In-Situ device for overnight Saliva Collection	May '18 – Aug '18
	<ul style="list-style-type: none">• Designed and 3D printed a novel mechanical device for collecting saliva, including a 3D printed hinge mechanism• Conducted product functionality testing using artificial saliva, in collaboration with partners in dentistry	
	Consultant at Rolling Cube, India	Mar '17 – May '17
	<ul style="list-style-type: none">• Co designed an algorithm based on image processing for assessment of designs for rapid prototyping	
	Solar Fruit Dehydrator: Mechanical Engineering Design Project, NUS	Aug '12 – Dec '13
	<ul style="list-style-type: none">• Led engineering design, including component and system designs, engineering analysis, and simulations• Winner of the Humanism Award at TECO Green Technology Competition (Taiwan)	