# Vivek Prakash Shimpi

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**EDUCATION**

**GEORGIA INSTITUTE OF TECHNOLOGY, College of Engineering Atlanta, GA**

**Bachelor of Science in Biomedical Engineering** *October 2012-December 2016*

* **Minor:** Materials Science and Engineering GPA 2.82
* **Awards:** Dean’s List, Six Sigma Green Belt SAT: 2300/2400
* **Activities:** Georgia Tech Rugby Football Club, Teaching Assistant for Problems in Biomedical Engineering 2

**DELBARTON SCHOOL, High School Morristown, NJ**

**High School Diploma with Highest Honors** *September 2008-April 2012*

* **Commendations:** National AP Scholar, National Merit Commended Student, National Spanish Honor Society GPA:4.3

**EXPERIENCE**

**ABBOTT VASCULAR / ST. JUDE MEDICAL (CARDIOMEMS) Atlanta, GA**

**Product Development Engineer I***January 2017-Present*

* Worked in new product development using electrical engineering, microfabrication technology, and CAD
* Lead cross-functional teams through design changes from feasibility through FDA submission and implementation
* Provided project management, guidance, and leadership for projects in design control remediation and design changes
* Designed and coordinated test methods, design verification activities, and validation of experiments
* Developed risk profiles for device design and organized risk-based design control activities

**Product Development Engineer Co-op***January 2016-January 2017*

* Assisted in new product development using electrical engineering, microfabrication technology, and CAD
* Coordinated sustainable engineering projects for current product error diagnosis and characterization

**GEORGIA TECH INSTITUTE OF ELECTRONICS AND NANOTECHNOLOGY Atlanta, GA**

**Equipment Trainer/Lab Technician/Lab Maintenance***December 2013-December 2015*

* Earned trainer status for over 20 nanomaterials characterization systems and trained over 250 post-doctorate and graduate students in proper equipment use and methodology
* Set up, repair, and maintain multimillion dollar ultra-high vacuum systems and componentsand labs/cleanroom spaces
* Awarded “Most Outstanding Co-op” in 2014

**GT MULTISCALE BIOSYSTEMS AND MULTIFUNCTIONAL NANOMATERIALS LAB (*unpaid*) Atlanta, GA**

**Materials Analyst/Cell Culturing/Microfluidic Device Fabrication***May 2015-December 2015*

* Apply materials characterization expertise for SEM, TEM, AFM, Raman, and Laser Microscopy analysis of materials and nanoparticles used in microfluidic device fabrication and applications
* Responsible for feeding, passaging, thawing, and freezing astrocyte, pericyte and human brain endothelial cell lines
* Fabricate microfluidic research devices using photolithography, PDMS soft lithography, and plasma treatment

**GEORGIA TECH RESEARCH INSTITUTE ELECTRO-OPTICAL SYSTEMS LAB (*unpaid*) Atlanta, GA**

**Physical Properties Analyst/Materials Analyst/Microfabrication Process Design***January 2015-August 2015*

* Analyzed quartz and environmentally treated thermal materials for properties such as thermal conductivity and lap shear
* Used SEM, TEM, Laser Microscopy, X-Ray Microscopy, and Nano-indention for materials characterization and analysis
* Designed a process for photolithographic microfabrication of a photoresist pattern on PDMS substrate for friction testing

**SKILLS**

**Languages:** English (Native); Spanish (Conversationally Fluent); German (Conversationally Fluent)

**Design Control:** Design Planning, Design Change, Design Verification, Test Method Validation, Design FMEA

**Software:** Microsoft Office Suite; Microsoft Project; Solidworks; Minitab; Adobe Photoshop; MATLAB; LabVIEW

**Electrical:** Micro-Scale Soldering; RLC Circuit Assembly; RF Signal Characterization

**Characterization:** UV-Vis, FTIR and Raman Spectrometry; X-Ray Photoelectron Spectrometry; Energy Dispersive Spectroscopy; SEM; Environmental SEM; TEM; Nano-Indent Hardness/Elasticity Analysis; Confocal Laser Microscopy; Optical Microscopy; X-Ray Microscopy; Atomic Force Microscopy; Wetting Angle Measurement; Optical and Contact Profilometry; Nano Dynamic Light Scattering; Zeta Potential Measurement

**Microfabrication:** Positive and Negative Photolithography; PDMS Soft Lithography; Carbon, Gold, and Palladium Sputtering; Reactive Ion Etching and Induction Coupled Plasma Etching; Plasma Cleaning; UV Treatment; Microfluidic Device Design and Fabrication; IR Laser Cutting

**Cell Culturing:** Cell Feeding; Cell Passaging (Astrocytes, Pericytes, Endothelial Cells); Cell Thawing and Freezing

**INTERESTS**

**EDEN SKY WELLNESS LLC. | Owner** *November 2017-Present*

* Performed product analysis to determine best-selling market niches and products
* Built business plan and projected profit analytics to guide product acquisition
* Designed branding, product, and packaging for OEM bath bomb products
* Coordinated goods production and shipment from Huizhou City, Guangdong to Atlanta

**PRINTED PLANTERS | Owner**  *August 2017-Present*

* Design 3D printed succulent planters and plant-related clothing
* Maintain multiple 3D printers through continuous repair and upkeep
* Manage a team of workers to produce inventory
* Purchase raw materials and tooling to allow continuous production of inventory
* Organize online storefront, sales, marketing, and advertisement strategies
* Maintain customer service relationships and store image

**GEORGIA TECH RELAY FOR LIFE | Executive Chair of Public Relations and Marketing** *December 2012-May 2015*

* Developed marketing strategies and coordinated events to increase participation in Relay for Life
* Managed a team of student volunteers in task allocation and guidance