**Sanje Ponndurali (NJIT)** – School of Management (Business)  
Research: Orange Phone Repair

**Crystal Rogers (NJIT)** – Business  
Research: Standard Property Investments

**Ilesha Sevak (NJIT)** – Interdisciplinary Design Studio—Honors College  
Research: QuikGraft

**Paul Sullivan (NJIT)** – Interdisciplinary Design Studio—Honors College  
Research: Koala Band

**Daniel Tanis (NJIT)** – Interdisciplinary Design Studio—Honors College  
Research: Koala Band

**Evan Tyerman (NJIT)** – Interdisciplinary Design Studio—Honors College  
Research: Koala Band

**Ivette Vargas (NJIT)** – School of Management  
Research: Antique Deals

**Biophysics SRP**  
Bartholomew Philip (NJIT) – Physics/Mathematics  
Research: Capacitive Measurements showing success of a sensor for aiding brain injury

**Deliris Diaz (NJIT)** – Physics  
Research: Toward a cancer treatment: optimizing the conformation of microtubules

**Sathvik Murli (NJIT)** – Physics  
Research: Development of software for a tonometer to prevent blindness

**Dhara Rana (NJIT)** – Physics  
Research: Analyzing the flexural rigidity of Microtubules in the presence of Taxol to fight cancer

**Dylan Renaud (NJIT)** – Physics  
Research: Fabrication of a high-power density, implantable fuel cell using functionalized nanotubes

**Jennifer Rochette (NJIT)** – Physics  
Research: Control of microtubule length variation and its possibility of controlling cancer

**Anthony Sanfilippo (NJIT)** – Physics  
Research: Successful fabrication and testing of a new tonometer for preventing blindness

**David Villacais (SEED)** – Physics  
Research: Impedance spectroscopy measurement of the membrane potential as a drug toxicity indicator

**Joshua Wang (NJIT)** – Physics  
Research: Measurement of ion channels using carbon nanotubes as a health check for a cell

**Theresa Wagner (NJIT)** – Physics  
Research: Fabrication of faster, more durable Vibration-Powered Impact Record for warfighter safety

**Phelan Yu (NJIT)** – Physics  
Research: Demonstration of a nanotube-enzyme device

**International Summer Student Exchange Program with Pontificia Universidad Javeriana**  
Garcia Karen (NJIT) – Biomedical Engineering  
Research: The Ulceration of the Diabetic Foot

**Stevi Guzman (NJIT)** – Chemical Engineering  
Research: Modeling and control of the oxygen transfer process in a bioreactor

**Juan Manuel Vasques (Pontificia Universidad Javeriana)** – Electronics Engineering  
Research: Functional brain mapping using high frequency fMRI signal

**Jessica Marfo (NJIT)** – Biomedical Engineering  
Research: Early diagnostic tools for Ulceration of the Diabetic Foot

**Juan Sebastian Adame (Pontificia Universidad Javeriana)** – Electronics Engineering  
Research: Three Degree of Freedom Admittance Controlled Haptic Device

**NSF Undergraduate Research Program; EXTREEMS-QED**  
Jake Brusca (NJIT) – Mathematical Science  
Research: Sequential Filtering for Signal Analysis

**Jacob Moorman (NJIT)** – Computational Science/Computer Science  
Research: Sequential Filtering for Signal Analysis

**NSF Nanotechnology**  
Sonali Kamath (NJIT) – Physics  
Research: Diabet-Ease: selectivity of nanotube-mounted glucose-oxidase tor glucose to treat diabetes

**Kenneth ly (NJIT)** – Physics  
Research: Deposition of aptamers on carbon nanotubes to detect target molecules for a blood sensor

**Hathija Noor (NJIT)** – Chemical Engineering  
Research: Effects of solvent-less coating with nanoparticles on drug release rate from tablets

**Akshat Patel (NJIT)** – Electrical Engineering  
Research: Switching graphene based Field Effect Transistor using negative differential resistance

**Danielle Quijano (NJIT)** – Chemical Engineering  
Research: Oxidation and combustion of mechanically alloyed nanocomposite Al-Mg powders in water

**NJ Space Grant Consortium Summer Research Program**  
Colin McHugh (Rampamo) – Physics  
Research: Control System for 2-m Solar Radio Antenna

**Michael Papili (Rampamo)** – Physics  
Research: Structures related to peptide aggregation for Alzheimer’s and Parkinson’s diseases

**Christo Videlov (Rampamo)** – Physics  
Research: Detection of an electrical signal from a single cell using carbon nanotubes

**NSF Faculty Research Experience Undergraduate Supplement**  
Timothy Boyle (NJIT) – Computer Science  
Research: “Efficient Algorithms for Analyzing Cascading Failures in a Markovian Dependability Model”

**Venkata Kajori (NJIT)** – School of Management  
Research: Applications of Nested Virtualization

**Frank Vorrius (NJIT)** – Physics  
Research: Effects of Atmospheric Propagation on wireless Terahertz Communication Links

**Research Advisors**

Dr. Ali Abdi  
Dr. Shahriar Afkhami  
Dr. Cesar Bandera  
Dr. Robert Barat  
Dr. Michael Bieber  
Dr. Ecevit Bilgili  
Dr. Bhartai Biswal  
Dr. Joseph Bozzelli  
Dr. George Collins  
Dr. Sanchyo Das  
Dr. Raj Dave  
Dr. Atam Dhawan  
Dr. Cristiano L. Dias  
Dr. Martha Zequera Diaz  
Prof. Casey Diekman  
Dr. Kyle Dobiszewski  
Dr. Edward Dreizin  
Dr. Michael Ehrlich  
Dr. Gabrielle Esperdy  
Dr. Edgardo Farinas  
Dr. Reginald Farrow  
Dr. John Federici  
Dr. Eric Fortune  
Dr. Richard Foulds  
Prof. Richard Garber  
Dr. Dale Gary

Dr. Haim Grebel  
Prof. Gal Haspel  
Prof. David Horntrop  
Dr. Dentcho Ivanov  
Dr. Michael Jaffe  
Prof. Alokik Kanwal  
Dr. Abdallah Khreihshah  
Dr. Eon Lee  
Dr. Trenna Livingston  
Prof. Bairaj Mani  
Dr. Eliza Michalopoulo  
Dr. Durgamadhab Misra  
Dr. Marvin Nakayama  
Dr. Camelia Prodan  
Dr. Ravindra M. Nugalhalli  
Dr. Usman Roshan  
Dr. Fredy Ruiz  
Dr. Ruby J. Sampson  
Dr. Yun Shi  
Dr. Andrew Sohn  
Dr. Gordon Thomas  
Dr. Xianqin Wang  
Dr. Wen Zhang
Ronald E. McNair Postbaccalaureate Achievement Program

Excelore Alexandre (NJIT) – Computer Engineering
Research: High-K Dielectric Material (HALO) - Si Interface Quality Studied by Mos-Capacitance Conductance Techniques

Noor Aby (NJIT) – Chemical Engineering
Research: Heterogeneous Initiation of Tungsten-based Reactive Materials

Jose Chacon (NJUT) – Chemical Engineering
Research: Effects of Turbulence on Burn Rate of Reactive Material Particles

Michael Cruz De La (NJIT) – Business & Information Systems
Research: Collaborative Learning through Assessment: Literature Review on Motivation and Assignment Editor

Pierre Mbe Fokam (NJUT) – Computer Engineering/Computer Science
Research: Indoor System Involving Wi-Fi and Visible Light Communication

Nazmul Hossain (NJUT) – Chemical Engineering
Research: Spark Ignition of Nanocomposite Thermite Powders

Jazlynne King (NJUT) – Chemical Engineering
Research: Conversion of Carbon Dioxide to Useful Liquid Chemicals Using A Novel Organic Based Catalytic System

Alex Nyamweya (NJIT) – Electrical Engineering/Applied Mathematics
Research: Developing Interpersonal Skills and Facilitating Integration of a New Learning Method

Joshua Ortega (NJUT) – Information Technology
Research: Collaborative Learning Through Assessment (CLASS) Facilitating of a Flexible Framework and Literature Review

Anthony Quarato (NJUT) – Chemical Engineering
Research: Impact of Polymeric Molecular Weight on the Physical Stability of Milled Drug Suspensions

HIT-NJUT Summer Research Program
Saba Bano (NJIT) – Biomedical Engineering
Research: Fabrication of gelatin/glycosaminoglycans (GAG) scaffolds using electrospinning technique in tissue engineering for spinal cord repair

Indrasis Banerjee (HIT) – Electrical and Computer Engineering
Research: A Hybrid System: Coexistence of Visible Light Communication (VLC) and Wi-Fi

Polley Bhunia (NJIT) – Electrical and Computer Engineering
Research: Statistical Modeling of the Received Power in Wireless Networks

Poulami Chakraborty (HIT) – Electrical and Computer Engineering
Research: Image Statistical Analysis & its application to Information Forensics

Sunandan Dhar (HIT) – Chemistry and Environmental Science
Research: Engineering CuO Laccase for Acidic pH Stability using Bacillus subtilis Spore Display

Sourav Dutta (HIT) – Electrical and Computer Engineering
Research: Characterization of Deep Level Defects in a Thin Film Solar Cell

Saptapadiwpa Ganguly (HIT) – Biomedical Engineering
Research: Functional MRI: A Tool for Evaluating Psychiatric Disorders

Sunil Kumar (BRCM CET) – Physics
Research: Analyzing and Finding Solar Radio Burst Events Using IDL

Gaurab Kar (HIT) – Mechanical and Industrial Engineering
Research: Analysis of Repeatability of an Industrial Robotic Arm

Mital Khanchandani (HIT) – Mechanical and Industrial Engineering
Research: Analysis of Repeatability of an Industrial Robotic Arm

Surajit Lak (HIT) – Electrical and Computer Engineering
Research: Statistical Modeling of the Received Power in Wireless Networks

Vikas Mittal (BRCM CET) – Biomedical Engineering
Research: Design and Fabrication of Variable pressure sensing microfluidic valve

Swapnaadeep Poddar (HIT) – Electrical and Computer Engineering
Research: Understanding Defects in TiN/HfO2/YSZ/YSZ Gate Stack

Aruja Rustagi (HIT) – Biomedical Engineering
Research: Fabrication and evaluation of PDVF-TrFE/PEO scaffolds for drug delivery

Samrat Saha (HIT) – Electrical and Computer Engineering
Research: A Hybrid System: Coexistence of Visible Light Communication (VLC) and Wi-Fi

Provost’s Undergraduate Summer Research
Rosa Al – Abdalla (NJIT)** – Biology
Research: The Trans – Palbar Self-Tonometer

Victor Aladele (NJIT) – Electrical Engineering
Research: ComfyMat for Diabetic Foot Ulcers

Andres Alban (NJIT) – Applied Physics, Math
Research: Infrared Imaging of Objects in Contact with Water

Nesseline Belceu (NJIT) – Civil & Environmental Engineering
Research: Magnetic Nanoparticles for Algal Harvesting

Karthik Chandrasekaran (NJUT)** – Chemistry
Research: Development of Anti-Oxidation Catalysts

Dayal Pitambar (NJIT) – Biomedical Engineering
Research: Relationship Between Brain Connectivity and Cerebral Blood Flow in Stroke Patients

Matthew Downey (NJIT) – Computer Science
Research: “Efficient Algorithms for Analyzing Cascading Failures in a Markovian Dependability Model”

Andrew Esteves (NJIT) – Biotechnology
Research: Engineering Bacillus subtilis spores to evolve G protein-co coupled Receptors for Directed Evolution

Stephen Harris (NJIT) – Mechanical Engineering
Research: Manufacturing and Characterizing an Air-Breathing Fuel Cell

Rajan Jain (NJIT) – Bioinformatics
Research: Complete Genome Pipeline for Mapping and Viewing Short Reads

Justin Joseph (NJIT) – Electrical Engineering
Research: SenVis Smartcane for the Blind and Visually Impaired

Monica Khattak (NJIT) – Biology
Research: Distribution of GABA and Glutamate in Weakly Electric Fish

Victoria Leybova (NJIT) – Chemical Engineering
Research: Boron-based reactive materials with biocidal combustion products

Melvin Matthew (NJIT) – Biology
Research: SenVis Smartcane for the Blind and Visually Impaired

Kevin McNamee (NJIT)** – Architecture

Shivansh Mishra (NJIT) – Chemical Engineering
Research: Elemental, Fundamentals based reaction Mechanism to Model Oxidation of C1 to C4 Sulfide Hydrocarbons under Combustion and Atmospheric Environments

Anmol Mittal (NJIT) – Biology
Research: Do motor neurons supply cross-inhibition in C. elegans locomotion circuit?

Josef Mohrenweiser (NJIT) – Mathematics
Research: Tracking Superparamagnetic Nanoparticles in Blood Flow

Sana Nazim (NJIT) – Biomedical Engineering
Research: An approach to mimic the fibrous protein in the extracellular matrix of articular cartilage via electrosprning

Oluwakorede Odetubi (NJIT) – Mechanical Engineering
Research: Modeling and Animation of Mechanisms used in Mechanical Design

John Palmeri (NJUT)** – Biomedical Engineering
Research: “Applications to Cancer treatment: The Determination of Young’s Modulus for Microtubules Stabilized with Paclitaxel and Analysis of Vibrational Modes.”

Sabrina Raia (NJIT) – Architecture
Research: Developing a New Eco-village Implementation Plan

Andrea Roesser (NJIT) – Biology/Math
Research: Decoding brain mechanisms for sexual signaling

Dhara Shah (NJIT) – Chemical Engineering
Research: Precipitation Reaction Experiment for the Chemical Engineering Student Laboratory

Jonathan Sorg (NJIT) – Biomedical Engineering
Research: Integrating the Kinect, iARM, and Optitrack Motion Capture System into a Low-Cost TMS Stimulation Positioning System

Andrea Roeser (NJIT) – Biology
Research: Developing a New Eco-village Implementation Plan

Koala Band

Matthew Armanious (NJIT)** – Interdisciplinary Design Studio—Honors College
Research: QuickGraft

Sheryl Carlson (NJIT) – Interdisciplinary Design Studio—Honors College
Research: Koala Band

Jonathan Colella (NJIT) – School of Management
Research: Better Cloud Hosting & Concierge

Dena Elmesalalmy (Rutgers) – Mechanical Engineering
Research: Elmaronic

Omar Elmesalalmy (NJIT) – Biomedical Engineering
Research: Elmaronic

Sayed Ali Kulkarni (NJIT)** – Interdisciplinary Design Studio—Honors College
Research: QuickGraft

Tamer Marshall (NJIT) – Mechanical Engineering
Research: Feeding by Reading

Stephen Morrison (NJIT) – Interdisciplinary Design Studio—Honors College
Research: Koala Band

Laura Osorno (NJIT) – Biomedical Engineering
Research: S&D: Science and Dermatology

Ashas Pathan (NJIT)** – Interdisciplinary Design Studio—Honors College
Research: QuickGraft

*Also participated in the Learn Startup Accelerator Program
**Also participated in the TechQuest Innovation Program as Winner
***Also participated in the Biophysics SRP program