

# **Summer Research Project (for High School Students) Offered by Dr. Dave Chatterjee**

**June-July 2017**

## **Overall Learning Goals**

The overall purpose of this summer research project is to help the interested high school students:

1. Gain greater awareness of how technology can be leveraged to create value.
2. Get a better feel for research.
3. Enhance their ability to be creative and think out-of-the-box.
4. Enhance their ability to write clearly and effectively.

## **Expectations From Students**

The selected students:

1. Must be highly motivated and self-driven.
2. Must be committed to produce high quality work.
3. Must be on top of things when it comes to managing the project.

## **Expectations of Dr. Chatterjee**

1. Provide guidance on an as-needed basis.
2. Write a letter of recommendation if he is impressed with the quality of work and level of commitment.

## **Disclaimer**

1. This offering has no involvement of The University of Georgia (UGA).
2. Dr. Chatterjee has no influence on UGA's admissions process.

## **Deliverable**

As stated under each of the project options (see next page)

## **Timelines**

- By June 1: Kickoff meeting (location to be announced)
- By June 5: Finalize project of interest.
- By June 15: Project status update
- By June 30: Outline of the draft report
- By July 15: A more complete draft report
- By July 30: Final report

## **Communication/Interaction Mechanism**

Depending on the nature of need, we will communicate/interact in person or electronically (via email or a video conferencing tool).

## Project Options

Option	Title	Overview and Goals	Deliverable
1	Overview of Business Process Management (BPM) Methodology, Tools, and Techniques	In this project you will learn how to analyze and improve business processes such as fulfilling purchase orders, processing claims, approving vacation requests, serving customers at restaurants, etc. You will also gain hands-on exposure to BPM tools such as Signavio and Bizagi.	Identify a process of your choice, capture it graphically, identify areas for improvement, and recommend changes.
2	Are Companies Diligently Securing Customer/Client Data? An Insight into Cybersecurity Preparedness and Regulatory Compliance of Firms	Most, if not all, companies like to claim that customer satisfaction is their top priority. Yet, when it comes to protecting client data, there is significant variance in the extent and level of compliance with cybersecurity guidelines and best practices. The project deliverable will shed light on the current state of cybersecurity preparedness and regulatory compliance of firms across different industries. It will also provide insights into factors and best practices to create and sustain an organizational culture that will be proactive in its approach to securing sensitive data.	A project report that will at least address the following: <ol style="list-style-type: none"> <li>1. Current state of customer concerns and expectations about data protection and use.</li> <li>2. Key elements of a robust information security plan.</li> <li>3. Success factors and best practices to create and sustain a highly reliable organization.</li> </ol>
3	Digitization Trends and Implications	The purpose of this project is to enhance awareness of digitization trends with a focus on how such technological innovations are likely to influence and transform professional and personal lives. You will select one or more of the following technologies/trends to write a report. <p>Artificial Intelligence Mobility Internet of Things Autonomous Computing Artificial Intelligence Cloud Computing Social Media 3D and 4D Printing Wearable Devices</p>	A project report where you review current technological trends and share your vision on how any one or a combination of these technologies are likely to transform the way we live or do business. For instance, this project gives you the opportunity to probe questions such as: a) Are robots our future life companions and work colleagues? b) What kinds of jobs and skill sets are unlikely to be taken away by robots? or, come up with an idea for a new business model or app.