

**The Summer IT (Information Technology) Institute
(for Wootton High School Students)**

June 25-29, 2007

at

Johns Hopkins University
Montgomery County Campus
9605 Medical Center Drive, Rockville, Maryland
(3 miles from Wootton High School)

Taught by Johns Hopkins University Full-Time and Practitioner Faculty

Description: The Summer IT Institute is being offered for the first time expressly for Wootton High School students. Those interested must have completed at least their freshmen year. We are limiting enrollment to 50 students for this Summer's IT Institute.

Deadline to Apply: February 15, 2007; Those selected will be notified by March 15, 2007.

Fee: \$350 for the Summer IT Institute (9am-4pm, June 25-29, 2007). **Must be sent in with the application by February 15, 2007.** Please make the check payable to Johns Hopkins University-Summer IT Institute. For those who are not accepted in the Institute, your check will be mailed back to you.

Topics and Format: The Summer IT Institute will have presentations in the morning session (9am-noon). In the afternoon (1pm-4pm), the students will apply what they have learned in the morning session to hands-on labs. The IT Institute will cover the following emerging and interesting topics (one day per topic):

- **June 25, 2007: Artificial Intelligence:** Will computer intelligence ever equal human intelligence? The focus will be on applications of artificial intelligence, especially knowledge-based systems. The students will develop an expert system prototype as an advisory system to emulate human thinking.
Taught by: Dr. Jay Liebowitz, Professor, Department of Information Technology, Johns Hopkins University; Lab Assistant: Hang Nguyen, Graduate of our MS-ITS Program, Johns Hopkins University.
- **June 26, 2007: Information Security:** How secure are today's computer and network systems? The focus will be on learning information security techniques relating to individual and organizational issues.
Taught by: David Vargas, President, Vargas Advanced Technologies Group, Inc. and Practitioner Faculty at Johns Hopkins University, Catholic University, & George Washington; Lab Assistant: MS-ITS Graduate Student in Information Security, Johns Hopkins University.

- **June 27, 2007: Data Mining:** How can you find interesting hidden patterns and relationships in large masses of data? The focus will be on discussing data mining techniques and how organizations are using data mining to their advantage. The lab will include use of SPSS Clementine, one of the leading data mining tools on the market.
Taught by: Dr. William Agresti, Professor and Interim Associate Dean, Department of Information Technology, Johns Hopkins University; Lab Assistant: David Rafati, Geico Scholar in Discovery Informatics, Johns Hopkins University.
- **June 28, 2007: Knowledge Management and Social Networking:** How can knowledge be better captured and leveraged in order to improve knowledge flows between individuals and organizations? The focus will be on discussing knowledge sharing techniques, with special emphasis on social networking analysis. *Taught by: Dr. Jay Liebowitz, Professor, Department of Information Technology, Johns Hopkins University; Lab Assistant: Hang Nguyen, Graduate of our MS-ITS Program, Johns Hopkins University.*
- **June 29, 2007: Bioinformatics:** What happens when you merge biology and information technology? Drug discovery, human genomics, scientific visualization, and other fascinating areas relating to bioinformatics will be discussed. A site visit to TIGR (The Institute for Genomic Research), walking distance from the JHU-MCC campus, will be conducted in the afternoon from 1-2:30 pm.
Taught by: Dr. Kristina Obom, Associate Program Chair of Bioinformatics and Biotechnology, Johns Hopkins University, and Dr. Bob Lessick, Lecturer, Johns Hopkins University.
- **A closing awards ceremony, with special guest speaker Michael Koval, Senior Vice-President & Chief Information Officer at Long & Foster Real Estate, Inc. and Practitioner Faculty (and MS-ITS graduate) at Johns Hopkins University, will be held from 3-4 pm on June 29 at JHU-MCC. Parents and siblings are invited to attend. Formal certificates will be awarded to the Summer IT Institute attendees.**

Application (please complete the information and essays below; please include the \$350 fee payable to Johns Hopkins University-Summer IT Institute; please include an official or unofficial high school transcript with your application; please include the waiver signed by your parents and yourself) :

Please mail the materials to: Dr. Jay Liebowitz, Professor, Department of Information Technology, Johns Hopkins University, 9605 Medical Center Drive, Room 228, Rockville, Maryland 20850; Tel: 301-315-2893; Fax: 301-315-2892; email: jliebow1@jhu.edu

Name: _____
Home Address: _____

Telephone Number: _____
Fax Number: _____
Email: _____
Cumulative GPA: _____(unweighted) _____(weighted)
Year in Wootton High: _____
Computer/IT Courses Taken: _____

Computer Skills: _____

Two Required Essays (please write no more than 100 words per essay; please answer on separate sheets of paper and attach):

1. Why does the field of IT interest you?
2. Why would you want to participate in the Summer IT Institute?

STUDENT & PARENT AGREEMENT
(Signatures Required Below)

We realize that the SUMMER IT INSTITUTE reserves the right to ask the student to leave the program for disciplinary reasons or other violations of University policies and procedures. If asked to leave, we understand the student must depart the program immediately.

Parents:

I understand that:

- The enclosed fee will be refunded in full only if your daughter/son is not accepted into the program or if the Summer IT Institute is canceled.
- Student and Parent/Guardian do hereby release and forever discharge and hold harmless Johns Hopkins University and the organizers of this Summer IT Institute and its successors and assigns from any and all liability, claims, and demands of whatever kind or nature, either in law or in equity, which arise or may hereafter arise from the Summer IT Institute with Johns Hopkins University.

Signature of Parent/Guardian: _____ Date: _____
Signature of Student (Applicant): _____ Date: _____