# CIRRICULUM VITAE

# TALHA J. ANSARI

Bachelor of Arts, Physics and Economics, Middlebury College, VT  $2\text{-}01\ 50^{\text{TH}}\ \text{Ave. Apt. P1B, Long Island City, NY 11101}\\ +1\ (802)\ 989\text{-}6729 \spadesuit \text{ Talhajansari@gmail.com} \spadesuit \text{ Talha@alumni.middlebury.edu}\\ \text{WWW.Talhaansari.com}$ 

### **EDUCATION**

- BACHELOR OF ARTS, Physics, Economics, Middlebury College, VT, 2008 12
- CAMBRIDGE UNIV. A-LEVELS, Roots College International, Pakistan, 2006 07
- CAMBRIDGE UNIV. AS-LEVELS, St. Mary's Academy, Rawalpindi, Pakistan, 2005 06
- CAMBRIDGE UNIV. O-LEVELS, St. Mary's Academy, Rawalpindi, Pakistan, 2003 05

### **QUALIFICATIONS & TEST SCORES**

- *Middlebury College* GPA: 3.5 out of 4.0
- GRE Scores: Verbal 160 (83%), Quantitative 165 (92%), Analytical 4
- SAT *Reasoning*: Verbal 600, Math 770, Writing 660
- SAT Subject Scores: Math II 800, Physics 800, Chemistry 800, Biology-M 800
- Cambridge A-Levels: 4 A's in Physics, Chemistry, Biology, Mathematics
- *Cambridge O-Levels*: 7 A's in Physics, Chemistry, Biology, Mathematics, Islamic Studies, Pakistan Studies, Urdu Language, and 1 B in English Language
- TOEFL (*ibt*): 109 out of 120

#### SKILLS & EXPERTISE

- Programming Skills: Java, JavaScript, Ruby, HTML5, VBA, Python, PHP
- *Software:* UNIX, Mathematica, LabVIEW, Igor, Eclipse, Splunk, AutoCAD, MS Excel, Stata, EViews, Minitab
- Language Skills:
  - Urdu: Native in speaking, reading, and writing
  - Hindi: Native in speaking
  - Arabic: Basic in speaking, proficient in reading and writing
  - Mandarin: Basic in speaking
  - Sanskrit: Basic in speaking

# ACADEMIC HONORS

- Member: American Physical Society, 2011 present
- Executive member: National Society for Professional Engineers, 2011 present
- Saba & Suhail Shaikh' 92 Scholar for 2010, 2011 and 2012, awarded to an international student at Middlebury College for exemplary academic and leadership potential
- Middlebury College Dean's Honor's List for Fall 2008, Spring 2009, Fall 2011, Spring 2012
- Middlebury College Scholar's List for Spring 2010, Fall 2010, Spring 2011
- Middlebury College Interfaith Cooperation Award 2010-11
- Only student in Pakistan in 2007 to score perfect SAT subject scores in all physical sciences
- Member of the preliminary team selected to represent Pakistan in the International Chemistry Olympiad 2006
- Roots College International full-tuition scholarship recipient for Cambridge A-Levels

## UNDERGRADUATE RESEARCH INVOLVEMENT

- The curious case of the SR830: Documenting and explaining the deviations of the SR830 lock-in amplifier from a Butterworth-filter based theoretical model (using LabVIEW for experiment control), for Physics Senior Thesis, Middlebury College, Spring 2012
- Perceptions in the U.S. of Pakistan's socio-economic policies, at National Planning & Development Commission, Government of Pakistan, 2011
- Use of lock-in amplifiers in detecting weak photo-signals from large distances, for Experimental Physics, Independent Lab Project, Middlebury College, 2011
- Intelligent Crime Detection at Public Places at Image Processing Center, National University of Science and Technology, Pakistan, 2010
- In Trade We Trust: The correlation between trade liberalization and HIV prevalence in sub-Saharan Africa, with Anil Menon for Regression Analysis, Middlebury College, 2010
- Documenting Price Puzzle in Pakistan: Positive response of inflationary indexes to a positive monetary policy shock, at The State Bank of Pakistan, 2010

## WORK EXPERIENCE

# HBO INC. - DIGITAL PRODUCTS, New York, NY

Jun. 2012 – present

Development Operations Engineer

- Analyzed the big data generated by HBO Go applications, using software called Splunk, to explore the correlation amongst various IT server performance metrics, leading to a 10% increase in the troubleshooting process of the web service.
- Increased the interactivity of HBO's data analysis infrastructure by building two XML dashboards and developing a time-range-picker function.
- Spearheaded HBO's research on Nginx webservers to replace Apache to achieve a 30% faster response times, and greater configuration flexibility.

# \*\* DEPARTMENT OF PHYSICS, Middlebury College

Spring 2012

Teaching Assistant

- Assisted students of Electricity & Magnetism introductory course in clarifying complex concepts, understanding homework problems, and devising strategies for problem sets and exams.
- Led weekly TA sessions, graded assignments, and managed student performance in the course using an Excel grading model.

# \*\* DEPARTMENT OF COMPUTER SCIENCE, Middlebury College

Spring 2012

Teaching Assistant

- Graded weekly theory and programming assignments of Python based Introductory Computer Science class.
- Assisted the professor with grade management by maintaining an Excel database for grade assessment.

#### ENERNOC INC., Boston, MA

Jan. - Feb. 2012

Energy Efficiency Intern

- Streamlined the data gathering processes by 65% by developing VBA macros for eight complex Excel functions including obtaining electrical consumption, per employee, from the EIA website.
- Assisted project managers in deploying building management systems and installing network jacks and gateways at eleven commercial sites in Boston.
- Worked with the hardware engineering team in the internal development of iLon S3 replacement device. Carried out a feasibility study of the product to estimate a 9% reduction in post-launch deployment costs.

# PLANNING COMMISSION, Government of Pakistan

Summer 2011

Economic Consultant

- Researched on the perceptions of Pakistan's developmental policies amongst US think tanks and economists; 40-page report presented to the honorable Prime Minister of Pakistan and accepted for a peer-review.
- Worked as a part of the 'Growth Strategy' team; researching, compiling and analyzing Pakistan's socio-economic data.

# • NATIONAL UNIVERSITY OF SCIENCE & TECHNOLOGY, Pakistan Research Assistant

Summer 2010

Gathered and organized literature at the Image Processing Center on a thesis project titled
"Intelligent Crime Detection at Public Places" – studied image processing techniques for human
recognition.

# • BARCLAYS CAPITAL, Islamabad, Pakistan *Summer Analyst*

Summer 2009

- Conducted market research and prepared a comprehensive 20-page industry overview report on the telecom sector of Pakistan.

# • STATE BANK OF PAKISTAN, Karachi, Pakistan

Summer 2009

Research Fellow

- Conducted econometric research on the presence of 'Price Puzzle' in Pakistan – a positive response of inflation to monetary tightening; presented findings to bank's acting governor during the State Bank's weekly scholar sessions.

## • \*\* TEAGLE FOUNDATION, Middlebury College

2008 - 10

Research Assistant

- Research Assistant for Prof. Kathleen Skubikowski on the project 'Navigating a Liberal Arts Education'. Organized and conducted interviews of liberal arts students in Middlebury and managed project database in coordination with six other liberal arts colleges.
- \*\* CENTER FOR TEACHING LEARNING & RESEARCH, Middlebury College 2009 12 Office Manager
  - Student manager of the primary educational support department at Middlebury College.
  - Managed student-tutor assignments, and served as the point person for students' academic help.

# • \*\* TECHNOLOGY AND MEDIA SERVICES, Middlebury College Audio and Visual Specialist

2009 - 12

- Supported students and professors with media related issues in smart classrooms.
- Conducted and oversaw college media related events, such as weekly screenings, as a trained 35mm projectionist.

# **SCIENCE HONORS & ACTIVITIES**

• SAINT MARY'S ACADEMY SCIENCE FAIR 2007 Roots College Team Representative

Feb. 2007

• G.I.K Institute of Technology Annual Science Fair 2007 School Team Leader Mar. 2007

<sup>\*\*</sup>Represents on-campus jobs

- NATIONAL CHEMISTRY TALENT CONTEST, Higher Education Commission Pakistan 2006 Young Science Fellow
  - Selected amongst the top 30 students from Pakistan to represent Pakistan in International Chemistry Olympiad.
  - Attended an intensive chemistry training camp at HEJ Research Institute of Chemistry, University of Karachi.

### **VOLUNTEER & COMMUNITY SERVICE**

- CENTER FOR COLLEGE ACTIVITIES AND LEADERSHIP, Middlebury College Jan. 2012 Cricket Instructor
- AL-SHIFA FOUNDATION HOSPITAL, Islamabad, Pakistan

  Chairman Student's Wing

  2006 09
- INTERNATIONAL ORGANIZATION FOR MIGRATION, Kashmir Oct. Nov. 2007 Field Volunteer
- ARMED FORCES INSTITUTE OF REHABILITATION MEDICINE, Pakistan Aug. 2006 Scout Intern

# LEADERSHIP EXPERIENCE

- *President*, Cricket Club Middlebury College, 2009 2012
- President, South Asian Student's Association, Middlebury College, 2010-11
- Co-President, Islamic Society of Middlebury College, 2010-11
- *President*, Middlebury Model United Nations, 2009-10
- Treasurer, Islamic Society of Middlebury College, 2011-12
- Treasurer, South Asian Student's Association, Middlebury College, 2009-10
- First Year Liaison, Islamic Society of Middlebury College, 2009-10
- Chairman, Young Friends of Al-Shifa, Al-Shifa Trust Foundation Eye Hospital, 2007-08
- Founder, Roots College Science Club, 2006-07