

Patricia Adriana Suriana

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Education	Massachusetts Institute of Technology (MIT) Candidate for Bachelor of Science in Electrical Engineering and Computer Sciences, Nuclear Engineering	Cambridge, MA <i>Expected: 2014</i>
	SMAK 3 Penabur High School Valedictorian in class of 150 students; GPA: 4.0/4.0	Jakarta, Indonesia <i>May 2010</i>
	Relevant Coursework 8.01, 8.02, 8.223, 18.01, 18.02, 18.03, 18.075, 6.01, 6.002, 6.071	
Experience	The Frankel Center, Ben-Gurion University of the Negev <i>Unique Permutation Hashing - Intern</i> <ul style="list-style-type: none">• Responsible for the implementation of Unique Permutation Hashing (code was written in Python)• Investigated the probability, uniformity, and efficiency of Unique Permutation Hashing• Developed a new hash function using modular arithmetic <i>Advisors: Prof. Shlomi Dolev</i>	Beer Sheva, Israel <i>June — August 2011</i>
	Research Laboratory of Material Science and Engineering, MIT <i>Detection of Absorption into Rabbit Urothelium of Drugs Released from an Intravesical Drug Delivery Device — Research Assistant</i> <ul style="list-style-type: none">• Responsible for material characterization of biodegradable materials for potential drug delivery device, specifically for urological applications. Materials considered: aliphatic polyesters, such as PLGA, PLA, PCL (polycaprolactone)• Conducted in vitro study to characterize degradation of given materials, which will include qualitative things like imaging and quantitative things like mechanical testing and mass measurements <i>Advisors: Prof. Michael J. Cima, Jennifer Shepherd, Ph.D.</i>	Cambridge, MA <i>January — May 2011</i>
	MIT Rotch Library of Architecture and Planning <ul style="list-style-type: none">• Pulling out hundreds of monographs from the stacks• Processing books that are going to be sent to off-campus storage	Cambridge, MA <i>November 2010 — February 2011</i>
Activities	Math is Fun and Challenging <i>Invited participant</i> Speakers: Prof. Andy Liu, former Leader of USA & Canada International Mathematics Olympiad (IMO) team; Prof. Sun Hwen Hsien, Leader of Taiwan IMO team	Jakarta, Indonesia <i>May 2009</i>
	Asian Science Camp <i>Participant</i> <ul style="list-style-type: none">• Total participants: 300 students• Participating country: Taiwan (R.O.C.), Singapore, Malaysia, Philippines, Thailand, South Korea, and Indonesia• Speakers: 5 Noble laureates and other world class scientists	Bali, Indonesia <i>August, 2008</i>
	Nanyang Technological University School of Mathematics and Physical Sciences Workshop	Singapore <i>June 2008</i>

3-day workshops; covered subjects in Physics, Chemistry and Mathematics

Awards	11th Asian Physics Olympiad, Taiwan: First rank of Bronze medal	<i>April 2010</i>
	Distinction Awards in Nanyang Technological University Concept Test in Physics	<i>August 2009</i>
	Math Kangaroo Level 11: First place	<i>March 2009</i>
	Distinction Awards in American Mathematics Contest (AMC) 12: Score 105 (Average score for all grade 11 participants: 67.1)	<i>February 2009</i>
	Qualified for American Invitational Mathematics Examination (AIME): withdrew	<i>March 2009</i>
Skills	Programming Ability: Python, Java	
	Software/Systems: Advanced Windows, Macintosh, MS Office	
	Languages: Indonesian (Native Speaker), Mandarin Chinese (Advanced)	
	Other: Can use Oscilloscope, Instron, FTIR	