Ariel Khatchatourian

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EDUCATION

Binghamton University, State University of New York, Thomas J. Watson School of Engineering   Expected May 2020
Bachelor of Science in Electrical Engineering
GPA: 3.75/4.00 | Dean's List: Spring 2017, Fall 2017, Spring 2018, Fall 2018
NYS STEM Incentive Program Scholarship | NYS Scholarship for Academic Excellence | Eta Kappa Nu Honor Society

TECHNICAL SKILLS

Programming Languages: Java, Python, Matlab, MIPS (Assembly), C, AVR (Assembly)
Technical Concepts: Xilinx ISE, Logisim, Soldering, Solidedge, Arena Simulation Software, Arduino
Technical Courses: Circuits, Digital Logic Design, Sophomore Design, Probabilistic Systems, Computer Systems I: Machine Organization, Programming Concepts & Applications
Current Course: Signals & Systems, Semiconductor Devices, Electronics, Programming w/ Objects & Data Structures

PROFESSIONAL EXPERIENCE

Tri Color Imaging | *Quality Assurance Engineer*   Summer 2016-Present
- Independently testing a website weekly to ensure proper function and efficiency of the code
- Return feedback and advise on how to improve the efficiency and visuals of the website

LJM Consultants | *Intern*   Summer 2017, Winter 2017-18, Summer 2018, Winter 2018-19
- Updated LJM's current customer database on Salesforce to ensure uniformity to make the transition to Customer Relationship Management system seamless
- Updated potential client leads and added potential prospects to the database using tools such as LinkedIn and ZoomInfo

National Student Leadership Conference | *Assistant Team Advisor for Engineering Program*   Summer 2017
- Developed and implemented lesson plans regarding engineering disciplines and skills, assisted administrative staff with program components and led a group of 14-16 high school students in discussions and debriefs
- Chaperoned 70+ high school students on field trips including NASA, Lockheed Martin and Dulles International Airport
- Fostered discussion with keynote speakers including the Executive Officer of the National Academy of Engineers
- Facilitated leadership and engineering activities such as an RC car, sea perch, trebuchet, and a capstone project

PROJECT EXPERIENCE

Binghamton University Mars Rover | *Manipulation Team & Electrical Team*   Fall 2017- Present
- Redesigning motor controls using Atmega 328 with C programming (Fall 2018-Present)
- Collaborated on the Manipulation team to design and construct the arm on the rover to service equipment, retrieve items, and collect soil samples (Fall 2017-Spring 2018)

Autonomous Rover   Spring 2018
- Designed program in assembly and used registers and an Arithmetic Logic Unit to convert into binary instructions, stored instructions using multiplexers to move the rover to a specified (x,y) coordinate
- Reprogrammed rover in C with algorithm to autonomously solve a maze

Binary Calculator   Fall 2017
- Created a 3 function calculator that can add, subtract, and multiply two 8-bit binary numbers and output the result in hexadecimal on the seven segment display
- Constructed the logic components on Xilinx ISE and uploaded the completed code on a Papilio Duo FPGA Board

Connect Four Computer Game | *Lead Front End Specialist*   Spring 2017
- Coded a complete game in python that allows the user to play against the computer or another user, tracks winning history
- Specialized in the front end GUI details of the game, also aided when needed in back end features

Arduino Project: Simon Says   Fall 2016
- Constructed a Simon Says children's game that displayed a pattern with LEDs and waited for input from the child to repeat
- Researched necessary materials for construction on an Arduino Uno Printed Circuit Board for the Simon Says design
- Presented completed project including research, technical, and design requirements at the Arduino Exposition open to staff, students, and professionals

LEADERSHIP EXPERIENCE

Binghamton University Club Field Hockey, *President*   August 2018-Present
- Oversee team's finances of all the team to make decisions for allocation of budget
- Organize all team travel, handle all administrative duties, and ensure team of 40+ students is running seamlessly

Binghamton Student Ambassador Program, *Assistant Program Coordinator*   January 2018-Present
- Oversee the program consisting of 300+ student volunteers, and manage 9 supervisors to ensure program is running smooth
- Work at various events for prospective students and families including open houses, information sessions and tours