

Edric Miroslav Gavin

Cornell University Ecology House 101 Country Club Rd Room B57 Ithaca NY 14850
3067 Jordan Rd Orefield Pa 18069 610-393-1027 emg92@cornell.edu

EDUCATION

- Cornell University, Ithaca NY. May 2016. Double Major Computer Science (GPA: 3.7) and Biology (GPA: 3.15). Cumulative 2.93.
- Parkland High School, Allentown PA. June 2012.

COMPUTER SCIENCE and MATH

Coursework:

- Introduction to Computing with Python; Object-Oriented Programming with Data Structures (Java); Computer Architecture and Systems Programming; Discrete Structures; Linear Algebra.

Projects:

- MIPS Processor, will build fully functioning processor in my Computer Architecture Class. Spring 2014.
- Self-taught vector calculus in preparation for taking Physics for Engineers: Electricity and Magnetism. June 2012 and January 2013.
- Took calculus course at Lehigh Carbon Community College Summer for fun. Summer 2011.

Related Experience and Achievements:

- Computer Lab Operator for Cornell Information Technology, 20 hours/week. Fall 2013-present.
- Volunteer math tutor at Parkland High School. 60 hours in spring of 2011; 25 hours in 2012.
- U1300 Scholastic Chess Pennsylvania State Champion, 2012. Team finished 2nd in state in 2012 (Team Captain) and 5th in 2010.

BIOLOGY

Coursework:

- Evolution and Diversity, Writing in the majors; Biology Laboratory; Ecology, Writing in the Majors; Neuroscience; Genetics and Genomics; Genetics Laboratory; Comparative Physiology; Molecular Biology; Honors General Chemistry; Honors Organic Chemistry I; Honors Organic Chemistry II; Organic Chemistry Laboratory.

Related Experience and Achievements:

- Envirothon Team 2nd best in the Lehigh Valley, PA. 2011 and 2012.
- Zoo Keeper Assistant. Cared for a wide variety of animals in all aspects and helped with the conservation of endangered species living at the zoo. August 2010.
- 800 in SAT Biology Subject Test and 5 on the AP Biology test. 2011.

SUMMER RESEARCH

- Summer 2013: Lehigh University, Bethlehem PA. Department of Chemistry. Dr. Moore.
 - Developed a technique to coat calcium fluoride windows with ultrathin films of titanium dioxide with nanometer control over thickness using polyelectrolyte-assisted adsorption.
 - Used a transmission electron microscope, a variable angle spectroscopic ellipsometer, and UV-Vis and FTIR spectrometers to evaluate the titanium dioxide films I synthesized.
 - Developed multiple protocols for future experimenters to take measurements using the tools described above.
 - Learned about the oxidation of carbon monoxide as catalyzed by titanium dioxide supported gold nanoparticles using "freeze-frame" spectroscopy and matrix isolation gas-phase ion spectroscopy.
- Summer 2011: Rensselaer Polytechnic Institute, Troy NY. Biomedical Engineering. Dr. Corr
 - Worked under Dr. David Corr on "Engineering Functional Muscle-Tendon Structures using Scaffold-Free Cell-Based Directed Assembly and Theoretical Modeling."
 - Learned standard cell culture techniques; used Flexcells and laser ablation.