



Genevieve Grivas

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EDUCATION

- | | | |
|---|----------|----------------|
| Rensselaer Polytechnic Institute | Troy, NY | 2017 – Present |
| Doctoral Student in Biomedical Engineering | | |
| Rensselaer Polytechnic Institute | Troy, NY | 2013-2017 |
| Bachelors of Science in Biomedical Engineering | | |
| <ul style="list-style-type: none">• Concentration in Biomedical Imaging and Instrumentation• Minor in Computer Science | | |
| Cumulative GPA: 3.52 | | |

RESEARCH EXPERIENCE

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|---|-----------------|------------------------|
| CemSIM, Rensselaer Polytechnic Institute | Troy, NY | May 2015 – August 2015 |
| Study: <i>Build a robotic ultrasound electrography system to image, quantify, and identify layer specific properties of multi-layer gastrointestinal soft tissue. Data collected will be used to accurately simulate areas of interest for minimally invasive surgical training.</i> | | |
| <ul style="list-style-type: none">• Techniques: agar phantom synthesis, robotic mechanical testing, CAD designing, FDM 3D printing. | | |

TEACHING EXPERIENCE

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| Engineering Processes, Rensselaer Polytechnic Institute, Teaching Assistant | Spring 2015 – Present |
| <ul style="list-style-type: none">• Assisted in machining of aluminum cannon/train, consulted various personal projects of students, facilitated on the following laboratory procedures: use of a lathe, vertical mill, sauntering, metal welding, and plastic welding, grading of laboratory reports and final examination. | |
| Physics II, Rensselaer Polytechnic Institute, Teaching Assistant | Fall 2014 – Spring 2015 |
| <ul style="list-style-type: none">• Facilitated laboratory procedures, proctored examinations, graded laboratory reports and examinations. | |

MEDICAL RELATED EXPERIENCE

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|--|--------------------------|
| Cardiologist Associates of Ellis Hospital, Schenectady, NY | October 2011 – June 2012 |
| <ul style="list-style-type: none">• Internship: shadowed practice doctors through clinical and hospital settings, learned basic clinical and diagnostic procedures, observed first-hand the following surgeries: coronary angiography, angioplasty, stenting, placement of pacemakers and defibrillators, EKG, echocardiogram, stress testing, ablation, coronary artery bypass surgery. | |

NYLF Med 2011, Babson College, MA

July 2011

- Participated in emergency medicine simulations, disaster triage simulations, hands-on experiences such as suturing, taking blood pressure, and observing latest in medical technology, observation of live total knee arthroplasty.

ADDITION WORK EXPERIENCE

Communications Specialist

September 2012 – November 2012

ARMA International, LLC, Albany, NY

June 2014 – August 2014

- Analyze communication networks between potential customers, clients, and investors; review, edit, and create social media accounts for marketing; document optimized pathways of marketing for specific consumers; initialize the creation of YouTube videos to demonstrate uses for MuniRoute™.

HONORS AND AWARDS

- Graduate from RPI, Cum Laude Fall 2017
- Undergraduate Academic Honors – Dean’s Honors List Fall 2013 – Present
- Recipient of The Rensselaer Medal

ADDITIONAL SKILLS

- Proficient in NX 8.5, MS Office, Matlab, Python, C++, C, Java, and Solidworks

RELEVANT CLASS WORK

- **Introduction to Artificial Intelligence** Spring 2017
Uninformed searching methods (BFS, DFS, Greedy), informed searching methods (A), linear programming, Bayesian networks, MDP, reinforcement learning, HMM, social choice, and an introduction to machine learning.*
- **Medical Imaging** Fall 2016
An in-depth exploration into the five imaging modalities: CT/X-ray, nuclear, MRI, ultrasound, and optical.
- **Biological Image Analysis** Spring 2016
Image reconstruction and pre-processing, grayscale and geometric corrections, image segmentation, blob analysis, cell/colony counting, and cell morphometry.
- **Electric Circuits** Fall 2015
Analysis and simulation of linear electric circuits and measurement of their properties, includes: resistive and energy-storage elements, controlled sources, operational amplifiers.
- **Signals and Systems** Fall 2015
Time and frequency-domain representation of continuous- and discrete-time signals and systems includes: convolution, Fourier series, Fourier transform, Laplace transform and z-transform.
- **Biomedical Engineering Lab** Spring 2015
Practice the following laboratory procedures: electrocardiography, spectrophotometry, cell membrane transport, ultrasound, robotic speech recognition, digital image acquisition and analysis, hydrogel tissue engineering-scaffold design.