Andrew Garcia

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gh interactive resume-> **click here** or go to:

www.github.com/andrew r garcia/myresume

Education

Ph.D. Chemical Engineering, *University of Florida*, Gainesville, FL. **2017–present**

M.S. Chemical Engineering, *University of Florida*, Gainesville, FL.

B.S. Chemistry, *University of Miami*, Coral Gables, FL.

Experience

Graduate Assistant, University of Florida, Gainesville. **08/2017–present**

- Crystal synthesis experiments through the conventional hydrothermal process.
  - Designing and executing experiments based on a working theoretical understanding of crystal synthesis.
  - Analyzing crystal structures through the use of X-Ray Diffraction (XRD) and SEM.
  - Collaborating with fellow researchers to characterize crystals through additional methods pertinent to our investigation's aims.
- Worked as a teaching assistant for the Computer Model Formulation(COT3502) and Chemical Kinetics and Reactor Design (ECH4504) chemical engineering courses for a year.

Associate Engineer, Xerox, Webster, NY. **07/2015–07/2017**

- Contributed to Xerox's intellectual property portfolio by passing invention submissions focused on toner quality improvement.
- Established an optimal toner design which was implemented at the production scale, preserving the company's interests.
- Designed chemical toners for Xerox, leaving the company after 2017s 2nd quarter (operating cash flow: $343 million, up $84 million from the same period in 2016).

Research Assistant, University of Florida, Gainesville. **12/2013–06/2015**

- Adapted a process which was used to support the submission of a $45,000 commercialization proposal in June 2014.
- Materialized primary goals of research project, making helpful contributions to the passing of a larger NIH R01 funded (about $180,000 for the year 2015) project.
- Co-invented a technology highly applicable to the $1.68 billion dollar market of nerve repair and regeneration.

Publications

1: AR Garcia, C Lacko, C Snyder, AC Bohorquez, CE Schmidt, C Rinaldi. (2017) "Processing-size correlations in the preparation of magnetic alginate microspheres through emulsification and ionic crosslinking" *Colloids Surf., A*. 529:119-127

2: AR Garcia (2015) "Synthesis of dissolvable magnetic microspheres for tissue scaffold applications (MS Thesis)" *University of Florida*

3: AR Garcia, I Rahn, S Johnson, R Patel, J Guo, J Orbulescu, M Micic, JD Whyte, P Blackwelder, RM Leblanc.(2013) "Human insulin fibril-assisted synthesis of fluorescent gold nanoclusters in alkaline media under physiological temperature" *Colloids Surf., B*. 105:167-172

4: W Liu, S Johnson, M Micic, J Orbulescu, JD Whyte, AR Garcia, RM Leblanc.(2012) "Study of the aggregation of human insulin langmuir monolayer" *Langmuir*. 28(7):3369–3377

Patents and Inventions

2016-2017: Xerox Trade Secrets: (6 total) Primary author of **5**

2016: Patent: C Rinaldi, CE Schmidt, C Lacko, Z Khaing, AR Garcia "Magnetically templated tissue engineering scaffolds and methods of making and using the magnetically templated tissue engineering scaffolds" **PCT Patent *WO2016183162 A1***, issued November 17, 2016

Skills

Programming: Python, Git, LaTeX, MATLAB, JavaScript, Visual Basic

Software: Minitab, ImageJ, MS Office, LIMS

Languages: Spanish and English *native/bilingual proficiency*

Certificates

Technical

09/2016: **Design for Six Sigma IDOV Green Belt**, Xerox

2015–2018: **Lean Six Sigma DMAIC Green Belt**, 2221-4545, IIE

07/2013: **Process Engineering Certificate**, University of Florida

First Aid

2015–2017: **Healthcare Provider**, NY15657, American Heart Association

2015–2017: **Heartsaver®First Aid**, NY15657, American Heart Association