

Joseph Francis Iannello III

302 North Derby Avenue, Ventnor City, NJ 08406
joe3tess@gmail.com
856-246-2770

SUMMARY

Recently graduated master's student seeking a position for continued career advancement. Individual possessing knowledge in many fields such as solid state physics, materials science, optics, and mechanical engineering. Goal oriented, with experience leading teams in laboratory and academic settings, was recently the lead researcher of a scalable perovskite solar cell project involving thin films, over the last two years.

EXPERIENCE

ROWAN UNIVERSITY, GLASSBORO, NJ

September 2016-June 2018

Research Assistant

- Designed, fabricated, and tested perovskite solar cells using chemical synthesis and deposition methods involving nanoparticles to fabricate thin films.
- Commonly used laboratory equipment, and instructed others on their function, such as X-Ray diffraction (XRD), scanning electron microscopy (SEM), Fourier-transform infrared spectroscopy (FTIR), quartz crystal microbalance (QCM), Keithley sourcemeters, spin-coaters, and solar simulators.
- Obtained data of solar cell power output and wrote a script in MATLAB to calculate the efficiency of a solar cell.
- Participated in faculty searches for the Mechanical Engineering department.
- Led research teams of varying sizes, provided instruction on proper laboratory research practices and safety standards.
- Compiled quizzes and exams for students, as well as graded presentations and reports.
- Wrote and successfully defended a thesis detailing the work conducted over the period of two years on perovskite solar cell fabrication.

REPUBLIC BANK, VOORHEES, NJ

June 2015-September 2016

CSA 1

- Entrusted with counting large amounts of currency.
- Cashed checks, performed withdrawals, deposits, and other transactions typically found in a retail bank setting.
- Provided excellent customer service to customers of all types, including small businesses.

OAK RIDGE INSTITUTE FOR SCIENCE AND EDUCATION, OAK RIDGE, TN

October 2013-March 2014

Visiting Scientist Intern

- Contracted with the Department of Homeland security at the William J Hughes Technical Center, in Egg Harbor Township, NJ.
- Obtained a security clearance during this time.
- Analyzed and collected data using the High Energy X-Ray (HEX) system.
- Wrote code in MATLAB for contraband detection using Dual Energy X-Ray computed tomography.
- Applied the Beer-Lambert law for the above code, and correctly calculated the absorption within a three percent error.
- Conducted periodic meetings of progress and results to research staff.
- Complied the MATLAB code at the end of the project, and sent it to researchers at Boston University for large scale implementation in airports.

JILLY'S STORES, OCEAN CITY, NJ

March 2012-June 2013

Store Manager

- Provided customer service typical of a retail clothing store.
- Performed embroidery on hats and other clothing according to customer specifications.
- Kept inventory logs of merchandise for the store.
- Managed store employees, in accordance to the store owner's wishes.

TD BANK, MOORESTOWN, NJ

October 2009-June 2010

Teller

- Entrusted with counting large amounts of currency.
- Cashed checks, performed withdrawals, deposits, and other transactions typically found in a retail bank setting.
- Provided excellent customer service to customers of all types, including small businesses.

TD BANK, MOUNT HOLLY, NJ

May 2009-September 2009

Intern

- Used D-3000 to verify that loans were up to date and the information was correct according to other systems.
- Commonly organized files and destroyed old files which were out of date.
- Entrusted with secure systems which held confidential information for multi-billion dollar companies.

LIBERTY LAKE DAY CAMP, BORDENTOWN, NJ

June 2008-August 2009

Summer Camp Counselor

- Watched children to ensure their safety.
- Performed many activities at camp to ensure a fun time.
- Wrote weekly reports on children to give to parents.
- Was counselor of the week.
- Organized the first end of the summer water balloon fight.

EDUCATION

ROWAN UNIVERSITY, GLASSBORO, NJ

May 2018

Masters of Science

- Major: Mechanical Engineering

ROWAN UNIVERSITY, GLASSBORO, NJ

May 2015

Bachelor of Science

- Major: Physics, Minor: Mathematics

SKILLS

- Competent in areas of materials synthesis such as refluxing and the sol-gel method.
- Specialized in semiconducting materials and devices.
- Proficient in thin film fabrication methods such as Chemical Vapor Deposition (CVD), Physical Vapor Deposition (PVD), sputtering, and etching.
- Programming Languages: MATLAB, GAMS, Labview, and Python.
- Familiar with process optimization techniques using MATLAB and GAMS.
- Supply chain management optimization skills.
- Fluent in areas of XRD, FTIR, SEM.
- Knowledge of the underlying physics of lasers and optical devices.
- Product management skills, such as house of quality creation.
- Efficient in Microsoft Visio, Endnote, Word, Power Point, and Excel.
- Able to use Solidworks to design and fabricate parts for laser cutting or 3-D printing.
- Experience in Design Failure Mode and Effect Analysis and its applications.

PROFESSIONAL REFERENCES

- **Wei Xue**, Assistant Professor, Rowan University

856-256-5358

xuew@rowan.edu

- **Kandalam Ramanujachary**, Professor, Rowan University

856-256-4000 ext. 5451

chary@rowan.edu

• **Shivakumar Ranganathan**, Associate Professor, Virginia Tech University
703-538-8447
Srangan3@vt.edu