

SHARON MISTRETТА  
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### SUMMARY OF QUALIFICATIONS

Creative Technology Teacher and IT Strategist specializing in iOS App Development and Robotics. Adept at working with a diverse student population to create differentiated instruction within a student-centered learning environment. Experienced at seeking out and working with faculty to create technology supported lesson plans. Well versed in managing the strategic planning of a school's Information Technology needs.

### EDUCATION

Johns Hopkins University, Baltimore, MD  
Doctoral Student, EdD Technology Integration in K-16 Education, Expected May, 2019

Columbia University, Teachers College, New York, NY  
Masters of Arts in Computing in Education, May, 2008

Fairleigh Dickinson University, Teaneck, NJ  
Bachelors of Arts in English Literature, 1979

### Certificates:

NASA Endeavor - STEM Teaching Certificate  
Columbia University, Teachers College  
Certificate in STEM Leadership - December 2014

NYU School of Continuing and Professional Studies  
Certificate in iOS App Development - May 2014

Rutgers University Graduate School of Education, Center for Effective School  
Practices Alternate Route Training, October, 2010 to May, 2011

### RELATED EXPERIENCE

NASA Endeavor - U.S. Satellite Laboratory, Rye, N.Y.

Instructor - May, 2016 to present - Coding, Robotics and 1:1 Devices

TA - September, 2015 to April, 2016 - Exploring Mars, Physics for Real Beginners, Life in Space: NASA ISS and Astrobiology

- Conduct online WebEx classes for teachers in the implementation of technology into the K - 12 classroom.
- Implement ROBOTC - RobotVirtualWorlds to teach robotic coding techniques to teachers.
- Develop online lesson plans for discussion board posting.
- Review, provide feedback and grade graduate required elements as posted.

Mercy College - New York, N.Y.

Instructor - July, 2016 to present - STEM Academy

- Utilizing RobotVirtualWorlds, instruct students, grades 7 - 16 in programming and robotic techniques.
- Transition virtual code to physical Vex IQ Clawbot robots.
- Create team building opportunities for students to collaborate successfully.
- Reinforce the integration of each of the STEM subject disciplines.

Immaculate Heart Academy, Township of Washington, N.J.

Technology Faculty - September, 2014 to June, 2016

- Utilize the "5E" Instructional Model and the Next Generation of Science Standards to assist my Java and iOS Application Programming, Web Design and Computer Applications.
- Create "flipped lessons" to promote active learning and provide my students with review opportunities and increased levels of understanding of lesson units.
- Integrate authentic NASA data into assigned projects to inform students about real world issues while teaching technology skills, analysis and interpretation of data.
- Introduce and foster the development of student problem solving skills using the engineering design

process. Students practice solving well-defined problems and increase competency in solving less structured design challenges.

- Mentored student teams during the 2015 NJIT Science Olympiad including Bridge Building (5th place), Complex Machines and the "Wright Stuff" model airplane glider.
- Moderate the IHA Robotics "Team Artemis" 2015 Google MoonBot Competition - Finalist.
- Moderate the IHA Destination Imagination 2016 Competition - Second and Third Place Teams.

Saint Joseph Regional High School, Montvale, N.J.

Technology Faculty - September, 2013 to May, 2014

- Introduction to Programming and iOS App writing course began with lessons in Objective C to prepare my students with the tools necessary to understand the fundamentals of coding.
- Utilized Xcode IDE to teach best practices in logic and coding techniques.
- iOS App writing built upon my students' knowledge of object oriented programming as projects were introduced to create Apps that utilized View Controllers imbedded in Navigation and Tab Bar Scenes. Frameworks in the UIKit, Foundation and CoreGraphics were introduced and implemented.
- Aptana Studio 3 IDE was utilized to facilitate JavaScript and jQuery programming.

Information Media Specialist - September, 2011 to October, 2013

- Established and directed New Media Center from its inception in September, 2011. Supervised all aspects of the installation and maintenance of thirty-eight computer Media Suite.
- Established subscriptions and developed the New Media Center webpage on the SJR website that provides access to student webpages, online databases of eLibrary, eBrary, Visual Thesaurus, Replica Edition of the New York Times, Global Collections of worldwide libraries, Primary Sources Collection, Access to Online SJR Textbooks, Axis360 eBooks.
- Supervised student-produced Voice Thread Podcast projects to support English, Theology and Spanish Courses.
- Implemented Turn It In subscription and conducted student seminars to facilitate research and the correct use of MLA formatting for student assignments.
- Implemented Geometers Sketchpad and Virtual Chemistry Lab software to support Math and Science curriculum.
- Collaborated with faculty to integrate technology into lesson plans. Conducted faculty orientation programs to support teacher webpages and homework postings.
- Maintained community database of emails to facilitate distribution of school communications to parents and other stakeholders.
- Created and implemented surveys to poll faculty, parents and students for Middle States Accreditation.

Tenakill Middle School, Closter, N.J.

Technology Teacher & Technology Coordinator, grades 5 - 8, September, 2010 to June, 2011

- Provided in-depth instruction to my fifth and sixth grade students in Technology class including Microsoft Office, iMovie Podcasts, Alice object-oriented 3D programming environment and Google SketchUp. Incorporated New Jersey Core Curriculum Standards for Technology into my lesson plans.
- Carefully observed my students' learning styles and implemented Individual Education Plans in order to fully engage all of my students according to their abilities and potential.
- Advised a daily, student-produced broadcast of morning announcements, news items and special features on a closed circuit cable TV network.
- Implemented Rosetta Stone Software to deliver Spanish Instruction to 150 students.
- Maintained thirty-five iMac Technology Lab, laptop carts and faculty classroom configurations.

Holy Family Catholic Academy, Norwood, N.J.

Technology Teacher, Grades Pre-K through Eighth, September 2008 to June 2010

- Created and implemented student-centered curriculum units utilizing differentiated instruction. Incorporated SmartBoard Notebook files into daily lesson plans.
- Taught fourth through eighth grade students how to develop and maintain wikis to edit technology terms and to learn web design.
- Developed and maintained Excel Workbook units utilizing authentic data obtained on the Internet to provide meaningful learning. Comparison Pricing using bar graphs, Population Analysis using pie charts and Water Treatment Companies using line graphs provided my students with the opportunity to manipulate real time data to construct knowledge.

Reach the World Organization, A foundation that places teachers in the NYC Public School System  
Intern with Columbia University, Teachers College, New York, NY, 2006 – 2008

- Created student-centered lesson plans which utilized software and internet-based technology with teachers in the New York City Public School System.
- Developed an Excel based lesson to learn about water quality using data from tests conducted by the Reach the World crew of the Makulu on four rivers in Africa. Students entered data compiled by the Makulu crew and graphed results.
- Developed a Legacy Instructional Design Model for a student centered Astronomy Unit.

### BUSINESS EXPERIENCE

United Jersey Bank, Ridgefield Park, NJ - Project Manager, 1984 – 1992

Manufacturers Hanover Trust, New York, NY - Technical Officer, 1981 - 1984

Datamatics Consultants, Englewood Cliffs, NJ - Senior Programmer/Analyst, 1979 – 1981

### TECHNOLOGY SKILLS

iOS App Writing, Objective C, Xcode, Java, NetBeans, JavaScript, HTML5, Responsive Web Design, jQuery, Java, COBOL, Basic, Fortran, Microsoft Office Suite, iWork Suite, Google SketchUp CAD software, Blogs, Dreamweaver, Aptana Studio, Wikis, Web-quests, Endnote, Engineering Encounters Bridge Builder, Smart Board, Voice Thread, TinkerCad and MakerBot 3D Printing, ROBOTC Virtual Worlds. Proficient in both Mac and Windows operating systems.

### CERTIFICATIONS & Awards

2016 - Outstanding Educator Award - North Jersey Media - The Record

ETS Praxis Recognition of Excellence in Elementary Education: Content Knowledge

Elementary School Teacher in Grades K - 5 (823624)

Elementary School with Subject Matter Specialization: Language Arts/Literacy in Grades 5-8 (824330)

2015 Top Thirty Finalist Team - Google MoonBot Competition

2016 Second and Third Place Teams - Destination Imagination Competition