

Andrew Fiorillo

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EDUCATION

NEW COLLEGE OF FLORIDA

BA IN PHYSICS, WITH HONORS
May 2015 | Sarasota, FL

LINKS

LinkedIn:// **Andrew-Fiorillo**
Github:// **andrewmfiorillo**

SELECT COURSEWORK

PHYSICS

Statistical Thermodynamics
Classical/Quantum Mechanics
Statistical Mechanics
Electrodynamics
Solid State Physics
General Relativity
Acoustics
Nanomaterials Research

COMPUTING & COMPOSITION

Analog Electronics
Audio Signal Processing
Scientific Computing: SVD Analysis

MATHEMATICS

Linear Algebra
Differential Equations
Statistics
Differential Geometry
Vector Calculus

RELEVANT SKILLS

LANGUAGES

Python • MATLAB • Java • Go • C++
JavaScript • R • ...and more!
English • Italian (Basic)

SOLUTIONS

OOP • Networking (TCP/IP layer)
Event-driven GUIs • RESTful APIs

SOFTWARE

Cloud Compute (EC2, GCE)
Dist. Compute (Custom¹, Spark, Hadoop)
NoSQL (Mongo, Cassandra)
SQL (SQLite, MySQL)
IT (VMWare, Fog, AD, ...)
Utilities (Git, VS2013, JetBrains, ...)

EXPERIENCE

INSPIRATA | SOFTWARE ENGINEER

May 2015 - Present | Tampa, FL

- Designed and constructed a file & metadata system for storing/allocating research data – implementing preparatory checks for FDA validation.
- Maintained and extended an in-house HPC cluster to be deployed more easily in multiple computing pools, some on LAN and some in cloud.
- Developed a system for collecting, securing, cleaning, and analyzing high resolution medical images.
- Worked with a focused group of Algorithm Scientists to develop ANN- and biologically-based analysis software.
- Developed miscellaneous tools to support development of algorithms and collection of image data, including: a multi-specification, multi-format image server; a format for collecting, storing, and versioning image annotations; and an extensible window processing function (not unlike MATLAB's blockproc) for complicated types of images.

NEW COLLEGE OF FLORIDA | LEAD TECHNOLOGY-STUDENT LIAISON

Sep 2012 – May 2015 | Sarasota, FL

- Provided desktop application support to faculty, staff, and students on the New College campus.
- Worked with IT Networking & Telecommunications team to improve campus connectivity and scalability.
- Served on Technology Advisory Committee to compose 5- and 10-year Equipment Renewal & Replacement Plans for New College.
- Authored documentation for the Office of IT to assist with troubleshooting and common end user issues.

ID TECH CAMPS | ASSISTANT DIRECTOR

Summers 2011-2014 | Stanford, CA; Princeton, NJ; Tampa, FL; Atlanta, GA

- Oversaw the curriculum and activities of a sleep-away technology camp for 7-17 year olds with courses in programming and game design.
- Managed staff of over 20 instructors and provided technical and academic support for their individual curricula.
- Provided individual- and group-instruction of semi-formal STEM curricula.
- Provided on-site technical support and network management for over 130 workstations (with 150+ daily operators).

RESEARCH

OPTICAL SPECTROSCOPY AND NANOMATERIALS LAB |

UNDERGRADUATE RESEARCHER

Jan 2013 – Sep 2015 | Sarasota, FL

- Worked with Prof Mariana Sendova and Dr Brian Hosterman to collect and analyze over 30,000 Raman spectra in differing geometrical configurations to model diffraction-like phenomena near silicon wafer edges.
- I wrote my honors thesis on this. Please ask me about it!

¹ RCAD is a proprietary computing solution that I worked on while at Inspirata.

† Additional information and references readily available.