

Peter Mangiafico

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Education

University of Virginia, Charlottesville. **ME Engineering Physics**. GPA = 3.63

Johns Hopkins University, Baltimore. **MS Education (focus on technology)**. GPA = 3.88

Johns Hopkins University, Baltimore. **BA Physics (focus on astronomy)**. GPA = 3.23

Work and Research Experience

Academic Technology Project Manager. Stanford University. November 2011-present.

Website: www.stanford.edu

Creating a digital repository and web presence for the Revs Institute collection of automotive materials. Working with a team of software developers in the Digital Library Systems and Services group, as well as academic researchers, digitization experts and the Revs Institute in Florida.

Senior Engineer - Applications. Streetline. August 2011-November 2011. Website:

www.streetlinenetworks.com

*Developed custom **Ruby on Rails** and **jQuery** based solutions in fast-paced, startup technology environment. Advising on transition to **agile** and **scrum** based software development process and working with a team of QA engineers.*

Consultant. Visionlearning. May 2011-present. Website: www.visionlearning.com

*Advising on implementation of website, social media and technology strategy for educational organization that produces and delivers **8.2m+ pages** per year of online science materials. Transitioning from custom **PHP** website to **Drupal 7**.*

Technical Lead, Interim Director, Biodiversity Informatics Group, Encyclopedia of Life, MBL, Woods Hole, MA. Jan 2008-Dec 2010. Websites: www.eol.org, www.mbl.edu

*Technical lead, interim group director, and software engineer on large scale, multi-million dollar, multi-institution project to catalog all information about all species of life on Earth into a single website. **Website launched February 2008 at TED conference** and currently serves **7.4 million+ pages** per year. **Led a team of 12 software developers and scientists, developed code in Ruby on Rails, jQuery and MySQL, managed external***

relationships, budgets, deal with staffing and hiring issues, assisted in grant writing and reports, worked in education and public outreach capacity, attended workshops and meetings as representative of the group and worked with other components of the project to fulfill project mission. Reported to steering committee and project director.

Founder, Knowledge Revolution, Falmouth, MA. Feb 2005-present.

*Founder of technology consulting firm, developed custom web and desktop applications, and technology strategies in **ASP.Net, classic ASP, Ruby on Rails, VB.Net, MySQL and SQL** server for clients in the meeting industry, scientific and medical association fields. Developed and sold meeting messaging and management system. Developed and launched Cape Cod community website: www.yourcape.com. Profitable each year.*

Web Developer and Project Scheduler, Convention Data Services, Bourne, MA. July 2004-Jan 2005. Website: www.cdsreg.com

Built classic ASP/SQL based web sites for online registration, worked on scheduling and process development for a team of 5 web developers.

Director of Web Application Development and Director of Educational Technology, Astute Technology (previously Medical Consumer Media and HealthAnswers), Reston, VA. Jan 1998-May 2004. Website: www.astutetech.com

*Oversaw R&D for multiple large-scale web projects in startup environment, new technologies and assessing their educational and technological merit. Worked closely with and **developed overall Internet strategies** for clients. Provided high-level marketing support to new and potential clients. **Managed eight software engineers** and provided vendor coordination for various large projects. Wrote white papers about new technologies and techniques and developed internal processes for maximizing project efficiency. **Successfully managed software projects, from large (multi-million) to small (single website)**. Selected and recommended hardware and software purchases for both internal needs and clients. Developed desktop and web software applications for both internal use and for specific client projects in HTML, ASP, SQL, Cold Fusion, VB Script, and JavaScript. Leader in the WebCasting Department, providing technical support.*

Data Analyst, Space Telescope Science Institute, NASA, Baltimore, MD. July 1995-Aug 1996. Website: www.stsci.edu

Research on Ultraviolet Imaging Telescope data. Primary author of scientific paper on UV stars in M33. Supervised work performed by undergraduate student. Coordinated results with colleagues working with Hubble Space Telescope data.

Open Source Projects, Languages, Patents, Publications

Programming Languages and Methodology

Agile and SCRUM with Ruby on Rails preferred. Drupal CMS. HTML, JavaScript, MySQL, .NET (including VB and C#), Real Basic, SQL, and PV-WAVE/IDL.

Open Source Projects Created/Contributed

ImpactProbe (Google Summer of Code 2010) - <http://github.com/peetucket/ImpactProbe>
Encyclopedia of Life Website - <http://github.com/EncyclopediaOfLife/eol>
Species Viz - <http://github.com/EncyclopediaOfLife/EOL-Species-Interaction-Visualization>
Encyclopedia of Life Ingestion Form - <http://code.google.com/p/eol-ingestion-form/>

Patents, Publications, and Selected Conferences and Talks

“Method and system for the storage and retrieval of web-based education materials”. US Patent #6789228. Accepted September 7, 2004.

Williams, Mark B.; Mangiafico, Peter A.; Simoni, Piero U. "Noise Power Spectra of Images from Digital Mammography Detectors". *Medical Physics, Volume 26, Issue 7*, July 1999, pp.1279-1293. <http://dx.doi.org/10.1118/1.598623>

“Liberate your data”. Google Summer of Code Mentor Summit, Oct 23-24, 2010. Mountain View, CA.

“Building the Encyclopedia of Life”. Elderhostel/Exploritas. Multiple talks 2008-2010. April 26, 2010. Astrobiology Science Conference (AbSciCon), League City, Texas.

Educational and Other Experience

Aviation. Private Pilot. FAA Certificate granted December 2007 for single engine land.

Research Assistant, Department of Radiology, University of Virginia, Charlottesville. Sep 1996-Dec 1997.

Worked on digital mammography detector design, developed programs in IDL and PV-WAVE to characterize detectors from Trex Medical and Brandeis University. Second author on two papers submitted to medical physics journals.

Education and Public Outreach Lead, MIT NASA Astrobiology Institute, MBL, Woods Hole, MA. Mar 2009-present. *Website:* www.complex-life.org *Creating*

education and public outreach opportunities, videos and other activities for the MIT team of the NASA Astrobiology Institute. Developed and maintained Drupal based website, YouTube channel, and other educational assets.

Kaplan Teacher, Feb 2005-June 2006. *Taught Kaplan SAT prep class.*

Physics Teaching Assistant, University of Virginia. Fall 1996.

Space Telescope Science Institute. 1995-96 academic year. *Volunteered in programs to work with local teachers on astronomy projects, and answering astronomy questions online. Volunteered in Baltimore City program to tutor students obtaining their GED (Maryland High School Equivalency Degree).*