Gabriel Sanchez

Education

Master of Music, Music Technology
- New York University (2016)

Specialization in Data Science
- Johns Hopkins University / Coursera (2015)

B.S. Information and Communication Technologies, emphasis in Computer Science
- Tecnológico de Monterrey, Campus Monterrey (12/2011)

Technical Skills

Programming:	Python, JavaScript/JQuery, Java, R, C#, C, Scheme, SQL.
Audio:	Renoise, Cubase SX3, ChucK, SuperCollider, Max/MSP, SPEAR.
Visual:	Quartz Composer, Processing, Paint Shop Pro.
Web:	HTML, CSS, Flask, Django, IIS, Tomcat, Apache, GAE.
Other:	Adobe Flex, Git, UML, RUP, XP, Arduino, MongoDB, XML, GNU/Linux, Microchip PIC18F.

Experience

06/2011 - current   IT Consultant

Website design, software development and consultancy services for a variety of clients such as Merrill Lynch (Bank of America), The Trust for the Americas of the Organization of American States, Becerril Coca & Becerril among others. Technology used: CMS, PHP, Python, Joomla, Wordpress, Google Analytics.

08/2012 - current   Creator / Software Architect - Scripthica.com

An open source web environment for learning, sharing and creating algorithmic computer music. I built and designed the application using tools such as Scheme, Python, Django, JavaScript/Jquery and GAE among other technologies. I used this software to teach a course on algorithmic composition with LISP at the National Center for the Arts in Mexico City. I've given multiple international conferences about this project. This project was successfully funded as a Kickstarter project. http://kck.st/1cgHV5D

09/2013 - 05/2014   Senior Software Developer - Enova

I was hired as a Senior Software Developer for Enova–an organization that develops educational software and games for underserved communities in Mexico recipient of the Microsoft Education 2013 award. I built the back-end for their business intelligence tool (System for Information and Statistics) that is used for their digital libraries and learning centers using Flask, Python, Postgresql among other tools.

Internships

09/2011 - 01/2012   Ericsson

I designed and developed a web application (GSC News) that converts PowerPoint presentation slides to images and presents them along prioritized alerts. The image-based presentations can be edited through an administration panel. Technology used: C#, MS SQL, ADO.net, LINQ, MVC, WCF, WSDL, Adobe Flex and IIS 7.

07/2010 - 12/2010   Autonomous Vehicles Research Lab - Tecnológico de Monterrey

I was part of a team responsible for designing an embedded system that converts signals coming from a physical interface to Controller Area Network messages within a network in a vehicle. My colleagues used a PIC18F micro-controller for circuit development. I modeled, documented and developed most of the

software using the C language and the MikroC libraries. The final product was tested and deployed successfully on the vehicle.

02/2010 - 06/2010   Community Learning Centers

I did an extensive analysis on how to improve the Centros Comunitarios de Aprendizaje web portal. An important virtual education program the provides education to thousands of people across the Americas. The result was a report comparing diverse learning managements systems, similar programs and improvements.

Distinctions

ACM SIGPLAN PAC Grant.
NYU Steinhardt Graduate Scholarship
Top 5% Developer at CodeEval.com (programming challenges solved with Python).
Outstanding score at CENEVAL. Test.
Exhibitor at Muestra Empresarial 2010.

Conferences & Publications

10/2014   An Introduction to Collective Algorithmic Music Composition
Self-published book
10/2014   Collective Algorithmic Music Composition with Scripthica
Visiones Sonoras - CMMAS (Morelia, Mexico)
09/2014   Artificial Intelligence & Music with Scripthica
/*VIVO*/ International Symposium for Code and Music (Mexico City, Mexico)
09/2014   Scripthica: A web environment for collective algorithmic music composition
ACM SIGPLAN ICFP - FARM '14 (Gothenburg, Sweden)
05/2014   Collective Algorithmic Music with Scripthica
Funcional( ) - National Polytechnic Institute IPN (Mexico City, Mexico)
05/2009   Algorithmic Composition Works I
Clinical Archives (Moscow, Russia)

Languages

Spanish (fluent), English (fluent), German (basic).

Teaching Experience

04/2014 - 04/2014   Algorithmic Composition with LISP - National Center for the Arts (Mexico City)

Courses / Workshops

06/2014 - 07/2014   NKS Summer School - Wolfram Science Summer School
06/2012 - 07/2012   Intelligent Audio Systems - Stanford University
06/2011 - 07/2011   Algorithmic Computer Music (WACM) - University of California, Santa Cruz
02/2011 - 05/2011   Generative Structures - National Center for the Arts
01/2011 - 02/2011   Sound Art - SOMA
06/2009 - 07/2009   Introduction to Max/MSP - Universidad Nacional Autónoma de Nuevo Leon

Personal Information

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