Borja Zarco

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Work Experience

Software Engineer · **New York, NY**
Google Inc. – Google Drive · *Dec 2016 – present*
- Develop and maintain a large and complex codebase using mainly Python and C++.

Software Engineer · **Norcross, GA**
Intergraph Corporation – GT STRUDL Development · *Feb 2014 – Dec 2016*
- Development and technical support for commercial software GT STRUDL.
- Develop and maintain modules using C#, C++, C and FORTRAN, with high focus on interoperability.
- Maintain large MFC codebase while incrementally migrating to WPF.
- Migrated legacy Win32 API based graphics to OpenGL.
- Team collaboration using Agile Scrum Methodology.

Graduate Research Assistant · **Atlanta, GA**
Georgia Institute of Technology – Computer Aided Structural Engineering Center · *Jun 2011 – Feb 2014*
- Development for commercial software GT STRUDL.
- Developed a fully automated test suite using C# and WPF, using parallel processing to cut down testing turnaround from weeks to several hours.

Graduate Research Assistant · **Atlanta, GA**
Georgia Institute of Technology – Computer Aided Structural Engineering Center · *Aug 2010 – Jun 2011*
- Research under the direction of Professor Dr. Kenneth M. Will.
- Topic: Development of a Modified Mindlin plate finite element based on mixed interpolations of tensorial components for commercial software GT STRUDL.

Personal Projects

Customer Management Application · **Atlanta, GA**
Web application developed for enterprise customer management · *Nov 2013 – present*
- ASP.NET Web API (SQL) consumed by SPA (ASP.NET MVC, AngularJS, Bootstrap).

Visual Structural Analysis (VSA) · **Atlanta, GA**
Object oriented finite element analysis platform · *Feb 2012 – Dec 2013*
- Java object oriented API on top of Netbeans Platform with OpenGL graphics.
- Mobile application for iOS and Android developed using C# and Xamarin.

Other Projects · **Atlanta, GA**
Other completed projects worth mentioning · *Jan 2011 – present*
- UI Automation engine and grammar (C#, ANTLR and Microsoft UI Automation).
- Resume generator (Ruby, JSON/YAML for data, output in any template format).
- Official site for professional tennis player Dean O'Brien (WordPress, PHP).
- Multiple Sublime Text packages (Python).

Education

Ph.D. Candidate in Civil Engineering – Structural Engineering · **Atlanta, GA**
Georgia Institute of Technology · *Jan 2011 – present*

Master of Science in Computational Science and Engineering · **Atlanta, GA**
Georgia Institute of Technology · *Jan 2011 – May 2013*
- GPA: 3.7/4.0

Master of Science in Civil Engineering – Structural Engineering · **Atlanta, GA**
Georgia Institute of Technology · *Aug 2009 – Dec 2010*
- GPA: 3.9/4.0

Bachelor of Science in Civil Engineering – Structures · **Cookeville, TN**
Tennessee Technological University · *Aug 2004 – May 2009*
- GPA: 3.6/4.0 (4.0/4.0 CEE Classes)
- Graduated with Cum Laude Honors.

Technical Skills

Languages	C#, C/C++, Java, Python, Ruby, FORTRAN, XAML, CUDA, JavaScript, CoffeeScript, HTML5/CSS3, SASS, PHP
Frameworks	WPF, ASP.NET, MFC, AngularJS, Xamarin, jQuery, OpenGL, OpenCL, Netbeans Platform
Methodologies	Agile Scrum, Test Driven Development
Platforms	Windows, Linux, OS X
Engineering	GT STRUDL, ANSYS, Abaqus, STAAD, ADINA, SAP, ETABS, Mastan, Smart 3D, AutoCAD, MicroStation
Math	Matlab, Mathematica, MathCad, Maple
Tools	Git, Team Foundation Server, MSBuild, LaTeX, Mercurial, Subversion, Visual Studio, NetBeans, Sublime Text, Microsoft Office

Languages

- Fluent in English and Spanish

Relevant Examinations

- Ph.D. Qualifying Exam, GT – Structural Engineering (April 2012)
- Fundamentals of Engineering, FE (June 2009)
- GRE, TOEFL, SAT

Academic Honors

- GT Dean's list (Aug 2009 – May 2013)
- Cum Laude Bachelor's Degree
- TTU Dean's list (Aug 2004 – May 2009)
- TTU Commissioner's Honor Roll (Aug 2006 – May 2009)

Athletic Honors

- Recipient of Athletics Scholarship (Aug 2004 – May 2009)
- OVC Tennis Player of the Year (May 2008)
- TTU Varsity Tennis Team Captain (2005 – 2008)
- TTU Varsity Tennis Team MVP (2005 – 2008)

Activities

- Order of the Engineer (May 2009)
- TTU Varsity Tennis Team (Aug 2004 – May 2008)