

Student of Computational Science and Engineering. Master's degree in Civil Engineering from Georgia Tech. Strengths in structural analysis and development of computer-aided solutions to engineering problems. Five years of experience with project engineering including field work, inspections, site safety, and international/cultural exchanges. Focus on dynamics and programming of simulations for structural and aerospace systems during graduate school. Developed applicable experience to a career in computational science especially one of developing methods to process data for engineering systems and to create increasingly efficient physics simulations.

QUALIFICATIONS

- Master of Science, Civil Engineering(12/2017).
- Master of Science, Computational Science and Engineering(in progress)
- Occupational Safety & Health Administration 10-hour certification in Construction Safety.
- Passionate about developing computer-aided simulations of phenomena in physics.
- Coding proficiency with C, Matlab, and Python.

EXPERIENCE

Project Engineer

Browder + LeGuizamon & Associates

1/2018 - present

Atlanta, Georgia, USA

- Structural design and construction administration for the development of data centers.
- Work included structural design, reviewing shop drawings, and on-site troubleshooting during development.
- Deadline oriented work involving coordination with multiple trades.

Project Engineer

HDR Inc.

6/2015 – 12/2017

Chattanooga, Tennessee, USA

- Assisted with bridge inspections, including data compilation and composition of repair reports for the client.
- Geotechnical engineering, including testing and analysis for intelligent compaction project at TVA's Fossil Plants; ran proctors, drive cores, borehole shear tests, dynamic cone penetration tests, and surveying.
- Water sampling for the Dalton pipeline expansion project to test the effects on local ponds.

Project Engineer

Black & Veatch

Overland Park, Kansas, USA & Gongliao District, Taiwan R.O.C.

7/2012 – 5/2014

- Provided structural engineering and inspection services for Taiwan's Lungmen nuclear power plant.
- Acquired knowledge of nuclear regulations and high safety standards.
- Moved into a role to verify calculation documents and provide corrections for other engineers.

GIS Technician / Quality Assurance

Rolta International Inc.

9/2011 – 7/2012

Alpharetta, Georgia, USA

- Utilized ArcGIS to provide the Alabama Power with a graphical representation of their statewide power distribution scheme with pertinent metadata for the electrical components.
- Duties included applying field updates to transmission lines, transformers, switches, and misc. components. Metadata included voltage, phasing, source locations, and links to other elements connected in series.
- Moved into a position on the Quality Assurance team.

Undergraduate Research Assistant

School of Civil & Environmental Engineering, Georgia Institute of Technology

9/2010 – 8/2011

Atlanta, Georgia, USA

- Collected and processed traffic data for research projects.

EDUCATION

Master of Science, Computational Science & Engineering

Georgia Institute of Technology (Online Campus)

in progress

Atlanta, Georgia, USA

- Focusing on creating computer-aided physics simulations, nonlinear dynamics, and advanced math/physics.
- Created orbital mechanics simulator using Unity and C# scripting for semester project.
- Experience with coding of iterative and direct methods for solving large systems of equations.

Master of Science, Civil Engineering

Georgia Institute of Technology

12/2017

Atlanta, Georgia, USA

- Focused on Structural Engineering and Programming for Engineering.
- Coursework included Advanced Structural Analysis, Earthquake Engineering, Finite Element Methods, Matrix Structural Analysis, Advanced Mechanics of Materials, Orbital Mechanics, Random Vibrations, Seismology, Structural Dynamics, and Structural Stability.

Bachelor of Science, Civil Engineering

Georgia Institute of Technology

8/2011

Atlanta, Georgia, USA