Zach Barbre

Software Engineer

Atlanta, GA | 404-245-1997

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Full Stack Software Engineer with a love for solving novel problems and the ability and desire to learn new technologies as needed. Licenced Professional Engineer with experience leading small engineering teams and working with partners to produce high quality building designs.

Software Development Skills

- Debugging, JavaScript, Python, Node.js, PostgreSQL, Bootstrap, Bulma, AWS, HTML, CSS, git

Education

Georgia Institute of Technology | B.S. in Mechanical Engineering | Atlanta, GA   2002 – May 2006

DigitalCrafts | Certificate in Software Engineering | Atlanta, GA   January 2020 – May 2020
- Full-time intensive software engineering training program covering full-stack development. Technologies learned include JavaScript, Python, including an emphasis on cutting-edge frameworks like React and Redux. Server-side technologies learned include Node.js, Express, and PostgreSQL.

Software Development Portfolio

Pandemic Georgia | pandemic-georgia.zachbarbre.com | github.com/zachbarbre/pandemic-georgia   March 2020
- Lead a 4-person team developing a web-based version of the board game Pandemic allowing teams of 2 - 4 players to try and defeat an infection virus spreading in the State of Georgia.
- Responsibilities included managing the team, developing the app's architecture, assisting with the game logic, user authentication and the basic visual design.
- Built with Node.js, Express.js, PostgreSQL, JavaScript, Bulma, HTML and CSS.

Brewfinder | brewfinder.zachbarbre.com | github.com/zachbarbre/brewery-locator   February 2019
- Member of a 3-person development team building a website that finds the users location and then provides the closest micro-breweries and brewpubs to that location.
- Primary responsibility was user geolocation, api calls to the brewery database and sorting the list of breweries based on the users location.
- Built using JavaScript, Bootstrap, HTML and CSS.

PyCatWhy? | github.com/zachbarbre/pycatwy   January 2020
- Member of a 3-person development team building a game where the player attempts to corral a ill-tempered cat into it's cat carrier by clicking on the cat to change its direction around the screen.
- Responsibilities included the cat clicking functionality, the cat carrier spawning, and the start/level menus.
- Built with Python and Pygame.

Professional Work Experience

McKenney's Inc | Project Engineer | Atlanta, GA   August 2016 – November 2019
- Designed mechanical and plumbing systems for high performance buildings in Atlanta. Worked as an Engineer for a mechanical contractor in a design-build capacity.
- Was responsible for the building design from conception to building turnover. Managed multiple shareholders' interests including, Owners, Architects, General Contractors and McKenney's construction Project Managers.
- Mentored Assistant Project Engineers and CO-OP students in engineering methodologies and best practices.

Ross-Bain Green Building | Senior Energy Modeler | Atlanta, GA   February 2016 – August 2016
- Took over the building energy modeling duties at a growing green building startup.
- Led the energy modeling efforts for multiple buildings that have received LEED accreditation.

Leppard Jonson and Associates | Mechanical Engineer | Tucker, GA   August 2010 – February 2016
- Promoted to lead small teams of engineers designing mechanical, electrical and plumbing systems for buildings throughout the country.
- Worked with Architects to produce high quality building designs and oversaw the Contractors to ensure a quality product was delivered to the building owner.
- Learned building energy modeling to engineering duties to provide additional services the company could offer.

Sunbelt Engineering Group | Mechanical Designer | Kennesaw, GA   December 2006 – August 2010
- Designed building mechanical and plumbing systems in a fast paced environment with a typical turnaround time of less than two week.

Additional Certifications: Registered Professional Engineer (Georgia PE036590)