Brandon Alvarez
Full Stack Software Engineer

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Software Engineer with a passion for collaborative problem solving. As a veteran drone operator, paratrooper, and former environmental engineer, holds extensive experience in assessing and tackling complex obstacles head-on. Viewed as adaptable, coachable and charismatic. Thrives in collaborative and forward-thinking environments, bringing fresh perspectives to motivate and develop a team.

TECHNICAL SKILLS

Front-End: HTML/CSS, JavaScript, Python, React.js
Back-End/Database: Node.js, Express.js, Flask, Django, MongoDB, Postgre, MySQL
Frameworks/Libraries: Bootstrap, React-Bootstrap, NumPy, Pandas
Other: Git/GitHub, REST APIs, AJAX, JSON, OOD/OOP, ArcGIS/GIS, AutoCad

PROJECTS

Breddit: The Better Reddit | *React.js, JavaScript, HTML, CSS, Python, Django*— **_Site Link_**
  * Developed Reddit-inspired, bread-themed, Full-CRUD social media application, as project lead and git/code maintainer
  * Built and deployed both a front-end and back-end including full-user authentication, the ability to make or delete posts and leave comments
  * Managed quality of front end design and styling, react routing and navigation, dark and light thems, as well as implemented a live chat function between users

PetLyfe Ecommerce Website | *React.js, JavaScript, HTML, CSS, JSON, Express.js, MongoDB* — **_Site Link_**
  * Led design and development of a full-stack pet style product ecommerce site on a 5-person team
  * Created a Full-CRUD database, deploying a products API using node.js, express.js, and Mongo/Mongoose
  * Managed project as technical lead and git/code maintainer for both front-end and back-end development, setting React.js component structure, hooks, and resolving merge conflicts

The Boogeyman: Front End game | *JavaScript, HTML, CSS, node.js, Git* — **_Site Link_**
  * Designed a 2D side-scrolling game with recursive animation functions and object-oriented design on Canvas while including arcade-style visuals and engaging sound effects
  * Generated game mechanics and collision detection using physics concepts and geometry to optimize game play
  * Manipulated data structures to randomly produce and remove objects from canvas and register keystrokes

EXPERIENCE

Water Engineer — May 2021 – Sept. 2022
Arup, Arcadis — *New York, NY*
  * Utilized Python and GIS for geoprocessing automation decreasing time to build hydraulic maps by 70%
  * Created fill-able forms which use JavaScript to perform hydraulic calculations and display results from raw data, improving access to business intelligence
  * Designed logic-based tool to determine and execute calculations by geometry and rainfall volume; reducing hydraulic design time by 150%
  * Utilized python to calibrate, run, and generate data visuals of transport models of contaminants in water bodies

Unmanned Aerial Systems (Drone) Operator — 2013-2017
U.S. Army — *USA, Europe*
  * Led teams as aircraft commander and flight simulator lead, deploying technology allowing for 50% increase in efficiency of maintaining a platoon of 30 operators monthly and annual flight currency
  * Maintained standards of drone technology documentation for emergency procedures and troubleshooting solutions

EDUCATION

General Assembly — New York City, NY
400+ Hour Software Engineering Immersive — *Aug. 2022 – Dec. 2022*

Manhattan College — Riverdale, NY
Bachelor of Science in Civil and Environmental Engineering, Mathematics Minor