# About the Opportunity
## 3D Software/Web Developer

Position: Full time
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**Company Bio:**
Candelytics is a veteran-owned, venture and accelerator-backed LIDAR/3D data analytics startup building the digital infrastructure that will allow users to visualize, analyze, and share complex 3D data over a web-based platform. We are a seed stage dual-use (commercial and government) company based in Cambridge, MA. As the winner of the Pentagon's inaugural Defense Innovation Accelerator, Candelytics is developing advanced 3D analytics that will solve pain points in both government and commercial markets.

We are targeting the U.S. military as our strategic beachhead market, starting with a billion-dollar pain point in the U.S. Air Force (USAF). _Candelytics is working to enhance the USAF's imagery intelligence operations, specifically with regard to post-damage assessment (natural or manmade) of airfield facilities._ The USAF 6th Air Refueling Wing (6 ARW) recently signed two government contracts with Candelytics to provide advanced 3D visualization capabilities to assist airfield operators for post-hurricane Airfield Damage Repair (ADR). 6 ARW is based in Tampa, FL at MacDill Air Force Base. As home to both the U.S. Central and Special Operations Command, MacDill is critical to U.S. national security; unfortunately, it is also located in hurricane-prone geography.

Currently, military and commercial airfield managers rely on 2D imagery and videos to assess airfield damages. Not only does 2D imagery provide insufficient data regarding size and volume of repair requirements, but it also makes object identification very difficult for imagery analysts. This is especially concerning as the Pentagon prepares for potential great power conflict in the Pacific and requires a fast and accurate method to identify unexploded ordnances, debris, and heavy airfield damages from a potential hostile military strike on U.S. deployed airbases.

Candelytics is building a web-based platform that will allow government and commercial users to visualize 3D data collected from LIDAR sensors; conduct analysis on point cloud data; and share annotated 3D files seamlessly over the web. Our team is developing initial capabilities in differential analysis, void detection, volumetric calculation, 3D-to-2D conversion, and object identification. Our aim is to ultimately commercialize these capabilities and deliver software solutions to support 3D use-cases in construction, insurance, mining, law enforcement, gaming, logistics, and other enterprise opportunities, in addition to supporting national security needs.

Candelytics is the winner of the MIT $100K Accelerate, Hofstra Veterans Venture Challenge, and Founder Institute pitch competitions. We are backed by MIT, Harvard, and the National Security Innovation Network (NSIN); have partnership agreements with a major LIDAR manufacturer and a U.S. Navy laboratory; and have received pre-seed funding from five venture capital funds.

**Description:**
We are looking for passionate and talented software developers and computer graphics engineers with *experience working in 3D visualization*. Working at Candelytics will provide you with the opportunity to make a significant contribution to a real-world national security challenge and build the foundation for the future of 3D data analytics.

**Reports to:** CEO and Lead Product Developer

**Responsibilities:**
- Design and implement an integrated web application that integrates various 3D tools
- Write clean code and contribute/integrate open-source projects and frameworks
- Demonstrate creative problem-solving for high performance web graphics
- Own features from development to deployment and able to work independently
- Communicate effectively with the team and envision the future of 3D collaboration together

**Preferred Skills:**
- Proficiency in HTML, WebGL, CSS, JavaScript, Python, React,
- *Experience with Three.js, Potree, or a similar project is highly preferred*
- Strong linear algebra expertise
- Familiarity with 3D rendering and computer graphics
- Familiarity with AWS S3, EC2, and databases is a plus

**Benefits of working with Candelytics:**
- *Contribute to real-world high-impact national security mission*
- Work on a small team with opportunity to take ownership in product development
- Gain experience building a product from the ground up at a unique early startup
- Be one of the first 10 employees at a dual-use growth stage company

**Compensation:**
Employees will receive a competitive salary and/or equity (either in options or restricted stock).

**Location:** remote/local

Candelytics is an equal opportunity employer that values diversity at our company. We encourage people from all walks of life to apply, without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, protected veteran status, disability or any other characteristic protected by law. Our management team does not tolerate discrimination or harassment at any point during our employees' and applicants' time with us, especially with respect to recruitment, hiring, placement, promotion, transfer, training, compensation, benefits, employee activities, and general treatment during employment.