



COMPANY FACT SHEET - 2018

FOUNDED: 2015

HEADQUARTERS: Lawrence, Kansas

EMPLOYEES: 50+ (8 Ph.D. Scientists)

PATENTS: 14+ pending patents

WEBSITE: www.ainstein.ai

OUR MISSION

Our mission is to enable safer driving, flying, working and living through radar-based technology.

WHAT WE DO

We are in the business of improving safety and protecting valuable assets through innovations in radar technology.

Ainstein makes radar systems smarter, more affordable and easier to deploy. We offer complete solutions for autonomous drones, advanced driver-assistant systems (ADAS), autonomous vehicles and industrial sensing – incorporating a combination of mmWave radar, sensor fusion and artificial intelligence (AI).

For years, cost, weight and performance constraints have hindered the wider adoption of radar. Ainstein makes radar systems accessible to everyone by overcoming these constraints.

WHY RADAR?

Radar is used for detecting the presence, direction, distance and speed of objects using high-frequency radio waves. Unlike LiDAR, radar is not affected by conditions such as rain, snow, fog and dust, making it more reliable for real-world automotive, aerial and industrial applications. Radar systems are also smaller and much less expensive to deploy.

WHY AINSTEIN?

Radar systems and the sensor data processing intelligence are the keys to our autonomous future. We offer deep scientific, mathematical and engineering expertise, along with full spectrum portfolio (24GHz, 60GHz, 76-81GHz) of hardware and software to support our customers in developing highly customized solutions with unmatched precision in unpredictable environments.

Our core team has more than a combined 100 years of experience in radar research and development with deep knowledge gained through projects funded by NASA, the U.S. National Science Foundation (NSF), the European Space Agency and others.

Other radar companies are **at least two to three years behind Ainstein**. Startups have been slow to market and are unable to produce at scale, while established companies are slow to adopt the newest technological innovations.

KEY DIFFERENTIATORS

Ainstein products can be fully customized to specific application requirements, have unmatched precision in **ALL** weather conditions and surface types, and are a fraction of the price of competitive products.

For UAVs

The US-D1 is the smallest radar altimeter on the market weighing less than 100 grams and uses only 1.5W of power, enabling longer flights.

The LR-D1 (long-range) is less than half the size (by volume) of a leading competitor's product, meaning more space for specialty sensors or cameras.

The LR-D1 weighs less than 1 lbs and uses less than 12W of power, compared to nearly 2 lbs and 40W of power used by a leading competitor's product.

We have the most advanced flight controller on the market.

For Vehicles

60% reduced packaging allows more flexibility and less likelihood for error.

Only two printed circuit boards (PCB) and five assembly steps compared to three PCBs and 10 assembly steps for a leading competitor.

10x the image resolution and 3x the accuracy in detecting 360-degree surroundings.

Combines radar and vision sensor fusion for increased precision.

For Security

The only provider offering a full radar detection system portfolio, including everything from short range to ultra-long range.

The ULGB-D1 is the only ground-based radar with a rotating stand, enabling 360-degree coverage for intrusion detection, threats, and anomalous activity.

Digital Beam Forming technology for highly precise elevation measurement and real-time processing for 3D detection, with speed measurement for more than 100 targets simultaneously.

MARKET SECTORS

Ainstein has enabled more than 200 customers (from Fortune 500 to mid-size and start-ups) across five continents to build smarter and safer drones, aircraft, vehicles and industrial products.

AUTONOMOUS DRIVING

- Pedestrian & cyclist detection
- Blind spot vision
- Collision warning
- Autonomous braking
- Lane departure warning & change assistance
- Headway monitoring
- Automatic emergency braking
- Adaptive cruise control
- Rear cross traffic alert

INDUSTRY & SPECIALTY VEHICLES

- Autotomize vehicles that operate in hazardous conditions with no traffic signs, lane lines, or established infrastructure, such as mines, crop fields, construction sites, etc.

AUTONOMOUS FLYING

- Enables safe and precise out-of-sight flying
- Object detection for walls, buildings, tree branches, power lines, etc.
- Real-time collision avoidance
- Advanced terrain tracking
- Above-ground proximity measurement
- Autonomous takeoff, landing & way-point navigation
- Only market-ready solution that maintains a constant above-crop canopy elevation

SECURITY & SAFETY

- Improve safety on a manufacturing floor or construction site with obstacle detection
- Detect moving people or vehicles without video recording, eliminating privacy concerns

AGRICULTURAL & INDUSTRIAL INSPECTION (DRONES)

- Mining subsurface exploration, oil & gas pipeline inspection, & leak monitoring
- Agricultural monitoring such as soil moisture, crop health, disease detection, etc.
- Agriculture drone can save up to \$50/acre in operating cost

LEADERSHIP TEAM



ZONGBO WANG
Founder and CEO



LIANYING JI
CTO



ANDREW BOUSHIE
VP Strategy & Partnerships

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