

Company Profile



Acme AI Ltd

House 410, Road 6, Mirpur DOHS, Dhaka 1216, Bangladesh
www.acmeai.tech



On-demand [data annotation at scale.]

This document outlines Acme AI's services, vision towards the future in the space of artificial intelligence, its specializations, and shares a brief of the company.

About

Acme AI Ltd is a data annotation outfit based in Bangladesh which provides fully managed on-demand annotation services at scale to enable computer vision-based neural networks and machine learning models.

Acme AI looks to penetrate the global AI domain by linking it's sleuth of frontline annotators and quality assurance staffs to provide great data annotation services with the best of prices.

Challenge

The world of artificial intelligence and autonomous systems is rife with challenges – the most dominant one being the labor required to teach a machine learning model how to work. This also breeds opportunities. A machine learning model needs millions of annotated datasets to learn what it needs to do which is delivered by human hands. The cost of labor is high in developed countries where Acme AI Ltd can support AI developers and researchers by providing cost-effective annotation services through mobilizing large frontline annotator workforces based in Bangladesh.

Glossary

Artificial intelligence. Popularly known as AI – it refers to the simulation of human-like intelligence in machines that are programmed to think like humans and mimic their actions. The term may be applied to any machine that exhibits traits associated with a human mind such as learning and problem-solving.

Computer vision. A field of artificial intelligence that trains computers to interpret and understand the visual world. Using digital images from cameras and videos, machines can accurately identify and classify objects – and then react to what they 'see'.

Data annotation. The process of labeling the data available in various formats like text, video or images. For supervised machine learning, labeled datasets are required so that the model can easily and clearly understand the input patterns.

Machine learning model. A sub-field of AI, it is a file/application that has been trained to recognize certain types of patterns. One trains a model over a set of data, providing it an algorithm that it can use to 'reason' over and learn from those data.

Neural network. A neural network is a series of algorithms that endeavors to recognize underlying relationships in a set of data through a process that mimics the way the human brain operates. In this sense, neural networks refer to systems of neurons, either organic or artificial in nature.

According to [Market Watch](#), the AI market value is projected to reach USD \$16 billion in 2016 and is projected to grow by 36% from 2017-2025.

History

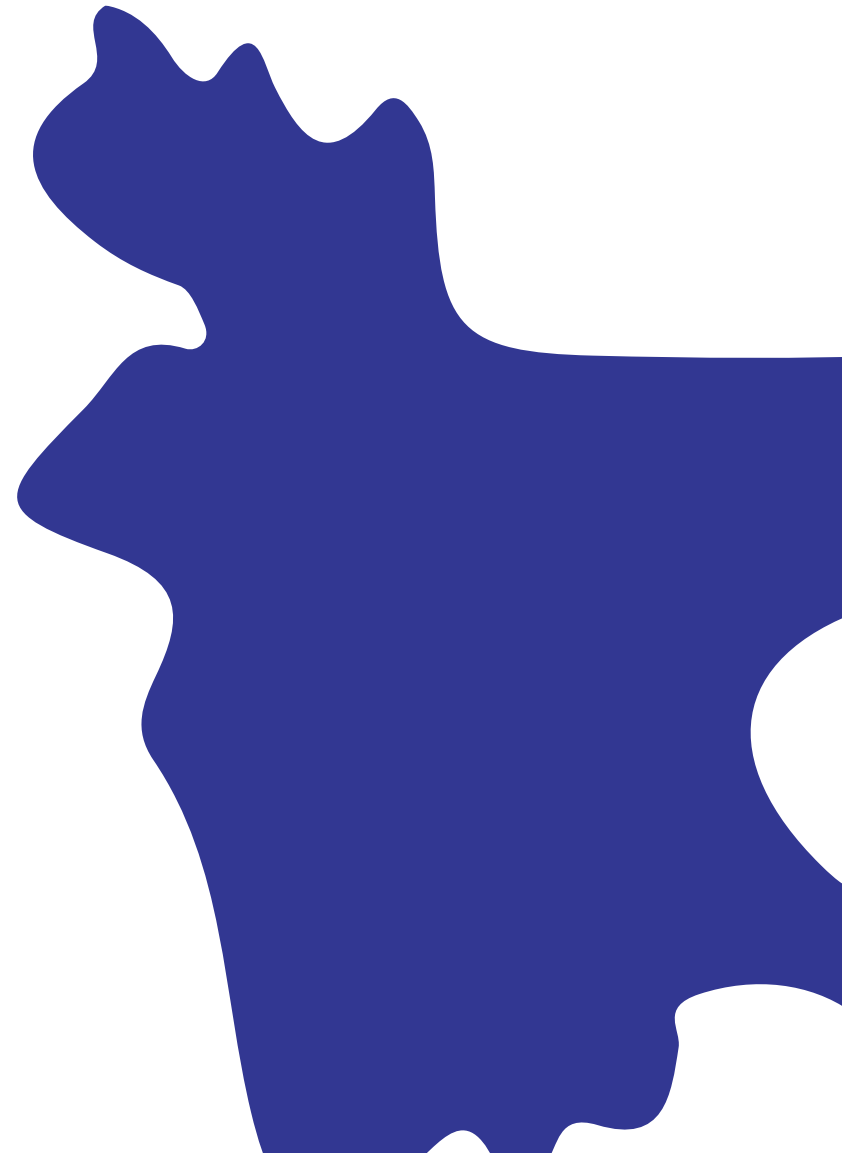
Acme AI Ltd started its journey in 2019 as a spin-off from ACME Technologies Ltd., a renowned real-estate developer in Bangladesh. With a vision to tap into the sizable and educated gig-workforce of Bangladesh, Acme AI works to refine artificial intelligence systems globally in order to enable the next technological revolution. In 2020, Acme AI partnered with SuperAnnotate Inc., a US and Armenia-based AI platform provider, to collectively serve clients with equal amounts of quality and agility.

Address

Located at the heart of the capital of Bangladesh with a premise production location in 410, Road 6, and head office at 630, Road 9 of Mirpur DOHS, Dhaka 1216.

✉ info@acmeai.tech

🌐 www.acmeai.tech



Leadership



Maj. Gen. Fatemy Roomy (Retd.)

Chairman, Acme AI

Retired and revered military officer. Served as a Director for Viyellatex Group, one of the largest RMG manufacturer in Bangladesh and began ACME Technologies Ltd. in 2009.



Maj. Gen. Shafiq-ul Islam (Retd.)

Managing Director, Acme AI

Served as CRP-Bangladesh as its Executive Director and as VC of Bangladesh University of Professional. During military service, he successfully led the steering committee for mobilization of National IDs for all Bangladeshi citizen in 2008 – a major national undertaking.



Sharek Roomy

Founder, Acme AI

Ex-Country Director of LaborVoices Inc. and a deep thinker in the space of digital technologies and ICTs. Founded Acme AI as a joint venture and set up the foundation of the company.



Sadhli Roomy

Chief Operating Officer + Co-founder, Acme AI

Award winning creative technologist, human centered designer, strategist, and Australia Awards scholar. Brought about the first ever APAC Effie award in Bangladesh in 2018.

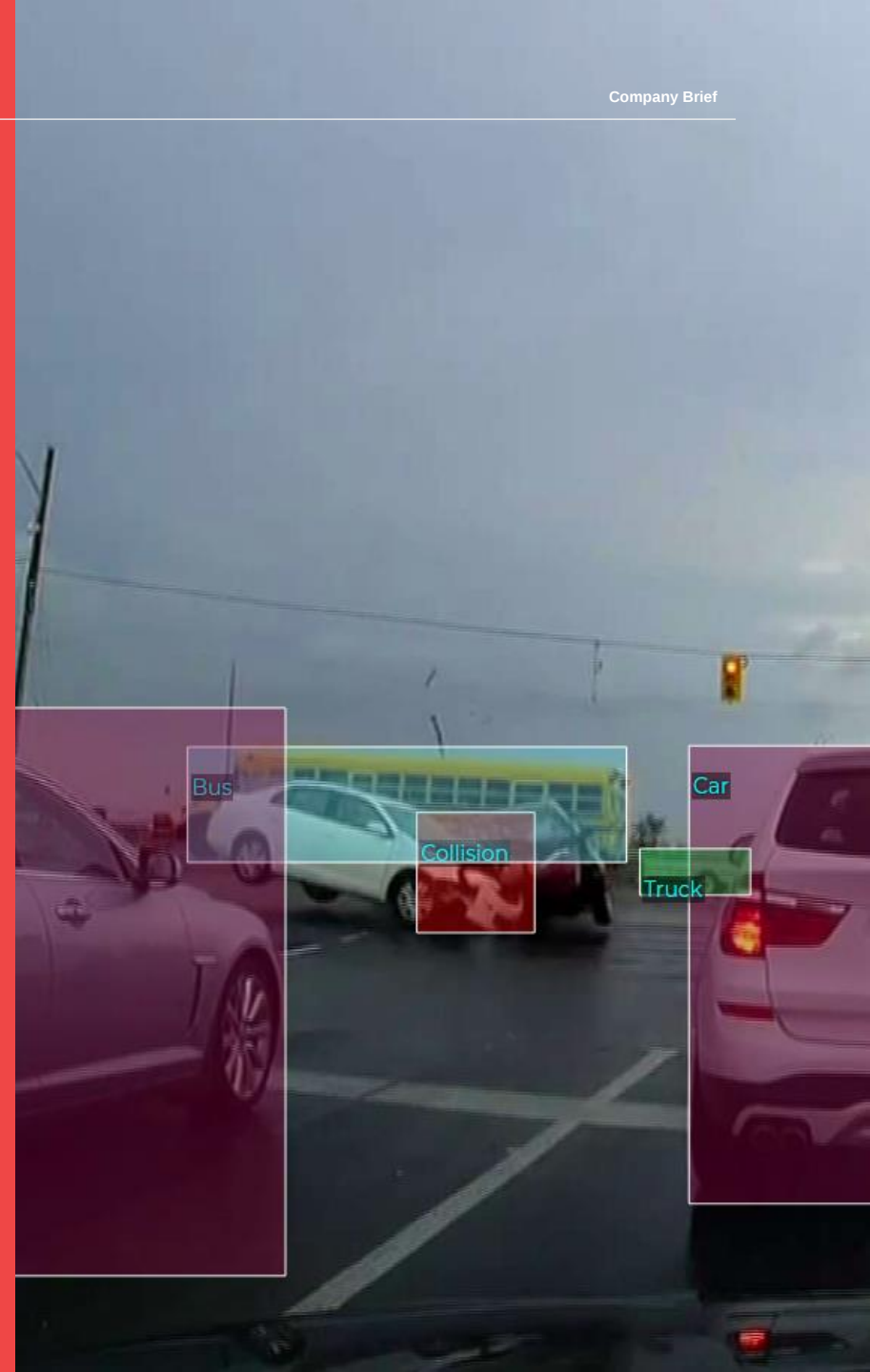
We provide data annotation services.

What is it?

A very common question we get from individuals not familiar with the AI, machine learning (ML), and neural network space. ML models, the algorithmic construct that makes up an AI, requires data and information to understand what it needs to do. As we are talking about AI – a crack at simulating an artificial human mind, it requires vast amount data in terms of text, images, and/or videos which needs to be appropriately labeled for a ML model to work.

Data annotation is the process of labeling data which is used to train a ML model to act/react in certain ways when presented with information.

Take Tesla's auto-pilot feature as an example. Provided the dataset for its underlying ML model is unrefined and/or faulty, the auto-pilot feature of Tesla cars would not work. Thus millions of labeled images, like the one on the right, needs to be fed to the model to make it work as per specification.





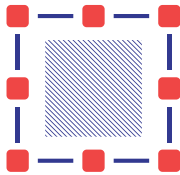
Data preparation and engineering tasks represent over **80%** of the **time consumed** in most **AI** and Machine Learning **projects**. The market for third-party **Data Labeling** solutions is \$150M in 2018 growing to over \$1B by 2023.

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Cognilytica, 2019

Annotation types

There are several annotation types and techniques, and we customize our services basing on client requirements. In general, we specialize in providing the following annotation types to AI developers and/or researchers:



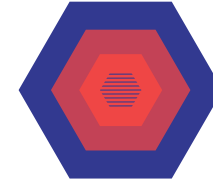
Bounding Box/Elipses

Labeled boxes, cuboids or ellipses drawn on objects



Semantic/Panoptic Segmentation

Classifying each pixel in an image to a class unique label



Polygon/Polyline

Shape objects using vertices for detecting exact edges



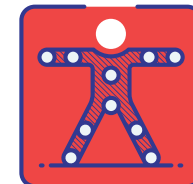
Categorisation

Classifying and sorting image content on multiple parameters



Video Annotation

Frame-based labeling of objects in a video for precision tuning



Point Labeling

Integrate points to annotate autonomous or organic structures

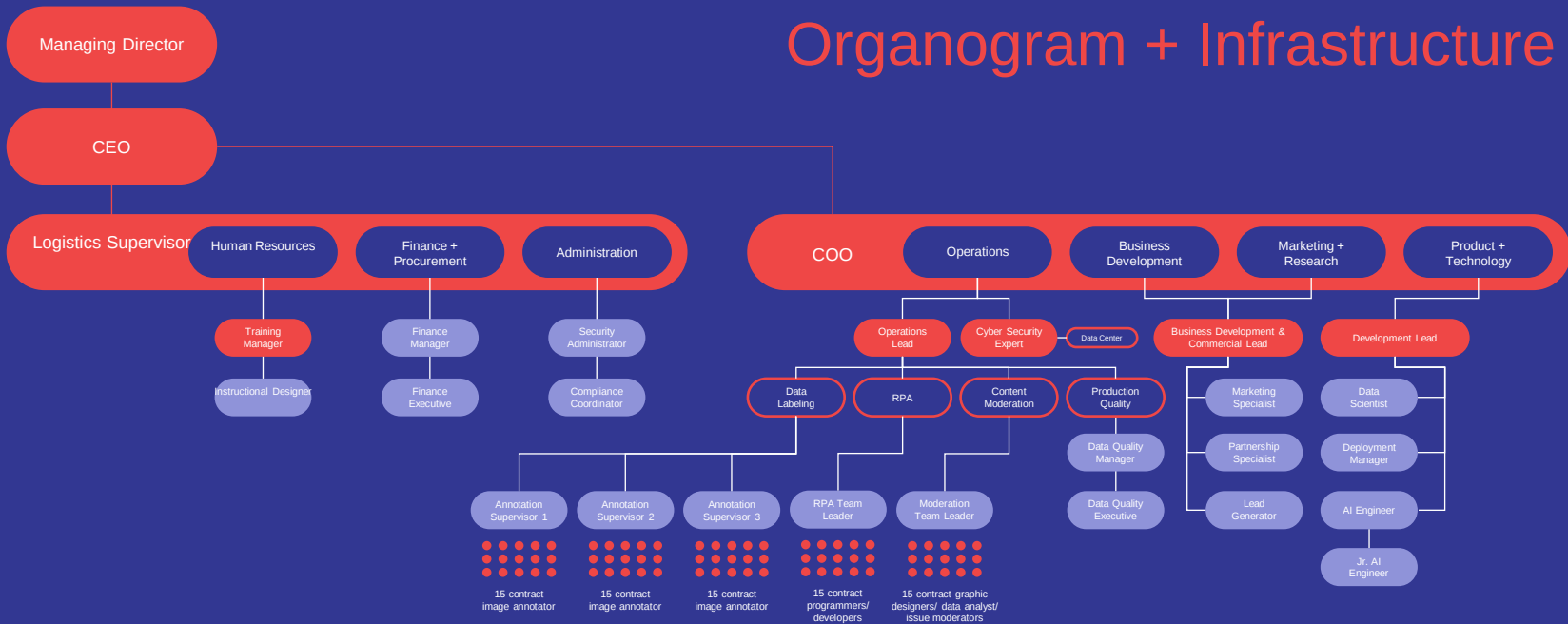
Greatest strength...

Educated, contractual, and skilled youths

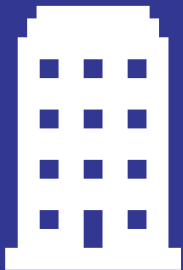
Bangladesh, as a nation, has a significant educated youth presence and a sizable portion of this population is unemployed. The number of the 'educated unemployed' are rising – reported to be 33.32% in 2016-2017 (Labor Force Survey, 2017). These workers are skilled in operating a computer but fails to get a job in Bangladesh because there is a notable lack of supply. Acme AI taps into this pool of educated and skilled workforces, trains them in annotations, and provides consistent work to engage them in the offshore service market – specifically in the space of data labeling.

8 fulltime, 90 contractual workers, and a target to increase it to 250 by February 2021

We work with a bootstrapped permanent staff of 8 people while our contractual annotator pool under appointment is 90 as of October 2020. We foresee the contractual workforce to reach 250 by February 2021 in order to service parallel accounts.



Subject to increase based on project volume and/or growth requirements.



Premise Capacity

Two apartments with a size of 4,400 sqft. combined in suburban Mirpur DOHS able to accommodate 40 people in one shift. Can accommodate two shifts in each calendar days based on location and community rules; resulting in 80 people sitting capacity.

Note: Capacity halved due to COVID 19.

Revenue streams

Acme AI has three primary revenue pockets which comes from its service and product commercialisation.



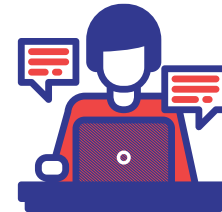
Annotation Services

Primary service of annotation provided by labeling data. Are margins are 2x comparing with cost of providing services.



Annotator Training

Training regiment for annotators delivered completely online as a standalone product. Serving as diversification pivot.



Offshore Placements

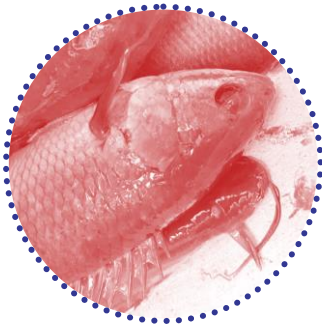
Provide affordable human resources for partner agencies to reduce the operating cost inherent in developed countries.



While annotation services are very profitable, we provide our services under a fixed slab and make 50% margin on those slab – making quality annotation services accessible and affordable.

Strategic Projects

Acme AI is investing on two strategic project that ensues diversification and product development. As opposed to service driven enterprises, these are products and hence have a commercialisation ecosystem associated with each. These avenues are:



Fish Disease Detection AI

Bangladesh is one of the world's leading inland fisheries producer with a production of 1 646 819 tonnes during 2003–4, with marine catch total of 455 601 tonnes and a total production from aquaculture of 914 752 tonnes during 2003–4. Fish diseases in inland closed fisheries is a serious concern particularly for pop eye, ventral reddening, tail and fin rot, haemorrhagic lesion over surface, dropsy, gill rot, white spot, epizootic ulcerative syndrome etc. These conditions are detectable visually wherein an CV-based solution to detect fish diseases makes sense and a logical market fit. Acme AI is thus working to curate partnerships to further research the problem and articulating the framework for product development.



Annotation Academy

An annotator supply ecosystem to train youths to become data labelers and to connect AI developers to source annotator at an on-demand basis. Annotation Academy will have a two-pronged approach; housing a rigorous paid training regimen on key annotation platforms for annotators and having a central platform to assess client requirements and provide annotators based on specialization, availability and cost – taking a service fee for each annotator sourced.

Vision 2022



1,000 Strong

By 2022, we want to incubate an internal, on-the-ready workforce of 800 expert annotators and 200 expert quality assurance staffs.



Certifications

Top-tier clients look for key certifications by third party audit firms. We intend to get ISO 27001 and SOC 2 certifications to eliminate this bottleneck.



Sourcing Platform

Become a nexus for platform providers, AI researchers and developers, and other annotation outfits to source contract annotators at an on-demand basis.



CV Thought Leader

Developing revolutionary computer vision solutions in Bangladesh and South Asia to tackle real-world problems with a focus on collecting grants.