

# AYR, Inc

## Simplifying Artificial Intelligence (AI) for Everyone

Intelligent Automation (IA) has transformed industries worldwide by harnessing the power of artificial intelligence and machine learning. IA can automate complex processes, detect patterns in large datasets, and streamline workflows. However, scaling IA initiatives to handle real-world data and document complexities remains a significant challenge.

AI models can struggle to handle real-world data variations, and the model's accuracy decreases significantly if the data fed to it was not seen during the training phase. For example, the tens of thousands of variations in layouts of Bill of Ladings challenge conventional AI data extraction models, which struggle to accurately identify and extract the necessary information.

The lack of user-friendly AI systems is a major challenge to scalability in Intelligent Automation. While AI models can be powerful, they can also be complex and challenging for non-technical users. This limits the scalability of these systems, as organizations struggle to find enough skilled professionals to develop and manage them. In addition, users are

hesitant to adopt AI systems if they find them difficult to use. Developing user-friendly AI systems is crucial for the widespread adoption and scalability of these technologies.

To address these challenges, AYR is committed to democratizing AI. AYR is a cutting-edge Intelligent Document Processing (IDP) company creating revolutionary AI solutions for a diverse range of industries, making AI technology accessible to all levels of enterprises. By simplifying AI technology and making it more user-friendly, AYR ensures that businesses can fully leverage the benefits of IA to stay competitive and drive growth in today's rapidly evolving digital landscape.

### Unlocking the Power of Artificial Intelligence

AYR, co-founded in 2018 by Dr. Tianhao Wu, is headquartered in Princeton, New Jersey. Dr. Wu is an accomplished expert in the field of Machine Learning with more than two decades of experience and a Ph.D. in Natural Language Processing. He has designed search engine systems, machine learning

platforms, and has successfully delivered over 200 real-world AI use cases. As the CTO of AYR, Dr. Wu continues to drive innovation in AI development, including the creation of the user-friendly SingularityAI platform.

AYR's team comprises skilled experts in machine learning, computer vision, and data science, and is dedicated to democratizing AI. As a result, AYR is well-positioned to be a leading provider of IDP solutions for businesses across all industries. The company's focus is on developing easy-to-use and scalable IDP platforms that empower businesses to leverage the power of AI technology and compete in a rapidly evolving digital landscape. AYR specializes in developing innovative AI solutions for enterprise customers, offering revolutionary solutions that are transforming businesses. According to Dr. Wu, "AYR delivers value to enterprise customers by providing solutions that address critical industry challenges such as semi-structured and unstructured data."

The heart of AYR is the SingularityAI platform, which enables non-data scientists to train highly-accurate AI



Dr. Tianhao Wu, PhD  
Co-founder, CTO

models with a minimal number of training samples. This intuitive platform utilizes patented technologies such as AI Pathfinder and Intelligent Data Simulator, as well as pre-trained backbone models, to achieve high accuracy rates of over 95% for all use cases. Even complicated use cases can be completed in just a few days, compared to the months-long process that legacy IDP and OCR vendors would require to achieve subpar results.

With a focus on simplicity, scalability, and accuracy, the SingularityAI platform is designed for use in various industries, including banking and financial services, insurance, healthcare, manufacturing, and

logistics. In addition to the SingularityAI platform, AYR also offers custom AI solutions tailored to specific business needs.

### Revolutionary AI Solutions for Businesses

One critical advantage of SingularityAI is its reusability and scalability, allowing enterprise customers to share models across different use cases and departments. As more data is processed, the platform improves and enhances its capabilities. It can easily handle hundreds of thousands of data changes having seen only a small portion of the data, generalizing knowledge to previously unseen data, similar to human learning. This sets

SingularityAI apart from conventional platforms, which build AI models effective only on the training data, limiting reusability, thus increasing the total cost of ownership, and causing frustration for clients.

AYR's AI solutions are also highly compatible with other automation tools, such as RPA and BPM. SingularityAI is built on a microservices stack, using containers, making it entirely self-contained, flexible, and secure. It can be deployed on-premises or in the cloud, offering flexibility and adaptability to enterprise customers across a wide range of industries.

### AYR's SingularityAI: The Ultimate Scalable AI Platform for Enterprises

In today's competitive business landscape, enterprises are seeking innovative solutions that can optimize their operations, reduce costs, and drive growth. AYR's SingularityAI platform offers unparalleled scalability, reliability, and performance, making it the perfect choice for enterprises looking to develop AI solutions that meet their specific needs. Unlike other platforms, SingularityAI can complete complex unstructured data use cases quickly and accurately without requiring data scientists, resulting in significant cost savings for enterprises. This advanced capability is a game-changer for businesses looking to develop AI solutions in a timely and cost-efficient manner.

SingularityAI offers a wide range of features that make it the ultimate scalable AI platform for enterprises. It offers data perfection, standard

connectors to upstream and downstream pipelines, a user-friendly and customizable reporting system, and business rules that can be configured by enterprise customers' SMEs and business analysts. These features enable enterprises to develop comprehensive and scalable AI solutions that meet their specific needs without the need for extensive resources. "The scalable approach makes the SingularityAI platform an attractive option for enterprise customers," says Dr. Wu.

SingularityAI also allows for 95%+ STP (straight through processing) in weeks or even days with very few samples, whereas many competitors can never exceed 60% STP, even when requiring thousands of samples and nine or more months of work with semi-structured and unstructured use cases. This sets SingularityAI apart from its competitors and provides a superior return on investment.

AYR leverages their SingularityAI platform to provide a range of key capabilities, including classification and information extraction from various sources, sentiment analysis for multiple languages, fraud detection, risk analysis, and background checks. This versatility and scalability enables AYR to offer effective and efficient solutions to clients across various industries.

#### **Success Stories and Recognition: AYR's Impactful Solutions**

Numerous enterprise customers have experienced significant improvements in efficiency and capacity thanks to AYR. For instance, a global logistics company processing millions of bills

*“AYR delivers value to enterprise customers by providing solutions that address critical industry challenges.”*

of lading (BOL) each month could only automate 10% of this volume with their previous automation approach. However, with SingularityAI, they now have more than 90% STP, irrespective of variability or unseen formats. Similarly, AYR helped a system integrator that handles more than 100 million semi-structured tax forms per year achieve more than 95% STP in just a few weeks, significantly reducing the need for manual processing and driving millions in savings.

AYR's dedication to delivering exceptional solutions and services to clients has been recognized by leading industry analysts. In 2023, AYR was 1 of only 5 vendors to be included in the Zinnov Zones Leadership Zone, a ranking that recognizes the top players in the IA space. Additionally, AYR has been recognized as a Star Performer/Major Contender in the Everest PEAK Matrix for 2021 and 2022 and the HFS Hottest of The Hot Vendors for 2022.

Overall, AYR's innovative approach to AI and automation, coupled with their commitment to customer satisfaction, has enabled them to achieve remarkable success stories and recognitions.

#### **AYR's Vision for the Future**

AYR has set its sights on becoming the world's foremost IDP platform and a dominant player in the IA industry. Thanks to Series A and upcoming Series B funding, AYR plans to expand its reach across different geographies while scaling its operations to accommodate its growing customer base and partner ecosystem. The company's engineering team will continue to refine the SingularityAI platform, introducing new features like auto-model training, enhancement, and deployment. Moreover, AYR seeks to democratize AI by launching its Community Edition, which will allow users to access advanced IDP tools and online learning resources at no cost.

According to Dr. Wu, "AYR has been primarily focused on the North America and APAC markets. However, 2023 will see AYR expand into EMEA and LATAM as we grow into a truly global IA leader." AYR's ambitious long-term goals place the company on track for continued growth and success in the rapidly-expanding IA industry.

