





Ashley Poon¹, Cathy Hou¹, Andy Poggio², Kamal Ardeshna³ ¹Henry M. Gunn High School, ²SRI International, ³Silicon Valley Social Venture Fund

One billion people, or 15% of the world's population, experience some form of a disability—a physical or mental impairment (McClain-Nhlapo, 2018). With low levels of employment, people with disabilities are often thrust into poverty and unable to pay for the often costly medical attention they need due to their disabilities. This creates a vicious cycle, one that completely ignores the needs and rights of those with disabilities. Additionally, it overlooks the amount of talent and potential present within this population. If tapped into, their participation in the economy would benefit everybody.

The growing field of artificial intelligence, or Al, is a branch of computer science that deals with the simulation of intelligent behaviors in computers and has the potential to employ people with disabilities. Currently, this is a field that lacks diversity and employs few people with disabilities (Silver, 2018). When people think about AI, they tend to envision tomorrow's innovators. The word disability, however, has a negative connotation among most and infers that one who does have a disability does not possess the intellect or ability needed to work in such a field such as Al. However, this is simply not the case. Talent is distributed evenly across different groups of people, but opportunities are not.

WHO WE ARE

4ai is a 501(c)(3) impact sourcing nonprofit based in Palo Alto, California.

Mission Statement: 4ai aims to close the societal gap through providing jobs to people with disabilities in the field of artificial intelligence.

SOLUTION TO

4ai exclusively employs people with disabilities to label images that are sold to Al companies to help develop their machine learning algorithms. We developed a software that allows our employees to perform the task of labeling images, a crucial step for training computer vision algorithms, a specific branch of Al that recognizes objects, shapes, and movements. Our process is simple. We first train our employees to use our software. Next, we recruit customers and work with them to determine specific details regarding needed image files. Our trained employees will then tag these files with a cross-check system that ensures the quality of our labels. Finally, we will send these labeled files to the customer and collect billings to pay for operating expenses, employees, and expansion. We also offer AI education workshops for people with disabilities.

REAL WORLD IMPACT



Figure 1: Our first Al workshop at Abilities United!

Figure 2: Cathy and one of our team members, Alex, teaching!





Figure 3: Abilities United thanking us for our hard work!

Figure 4: Winning multiple awards for our work with 4ai



support our cause:



Last year, we successfully legally implemented our nonprofit with the state of California. This year, we worked on attaining 501(c)(3) status; after filing the 1023-EZ form and patiently waiting, we received notice from the IRS that we were now 501(c)(3) certified. Currently, we are raising funds through our online crowdsource funding page (<u>www.gofundme.com/4ainonprofit</u>) and applying for grants, including the City of Palo Alto's Thinkfund Grant.

Throughout this year, we have been running AI workshops in partnership with Abilities United for clients with disabilities. Through these workshops, we have testing our labeling software with multiple clients. After discovering that some clients had difficulty using a trackpad to label the images, we tested the effectiveness of touchscreen laptops, which we found to show very promising results. This has led us to plan on investing in more touchscreen devices.

In terms of publicizing 4ai and pitching the company to potential investors, we have participated in numerous entrepreneurship competitions. Through The Diamond Challenge, the top-ranked high school entrepreneurship competition, we received funding for 4ai and recognition as a top 30 social innovation in the world. We were also recognized as apart of 25 under 25, a magazine recognizing 25 US social entrepreneurs under the age of 25.

Future Actions:

We hope to reach 3 new states with low levels of employment for the disabled by 2023. In establishing the organization in multiple communities, we hope to spread our positive message of the benefits of employing people with disabilities to other companies in the area. We are also developing our software to handle additional types of labeling requirements, such as audio labeling, do keep up with the growing demand of artificial intelligence

ACKNOWLEDGEMENTS / REFERENCES 🖒

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