

Podcast Name: *ACM ByteCast*

Episode: Charu Thomas

Welcome to the *ACM ByteCast* podcast, a series from the Association for Computing Machinery! The podcast features conversations with researchers, practitioners, and innovators at the intersection of computing research and practice about their experiences, lessons learned, and visions for the future of computing. In this episode, host Scott Hanselman is back for another episode of *Hanselminutes*, in association with *ACM ByteCast*! He is joined by Charu Thomas, CEO of Ox and someone who is completely revolutionizing pick methods with augmented reality.

The conversation begins with a look at Charu's background and current work. She attended Georgia Tech and graduated from their #1 industrial engineering program. After graduation, she moved to Arkansas as a part of a startup accelerator. Once there, she found a unique ecosystem centered around retail and supply chain in the state. There are three Fortune 500 companies and some of the best supply chain and retail executives are in Arkansas. Charu was able to build relationships with them and even recruit a few to join the startup as they grew.

Charu defines order picking as the process where front line operators are tasked with going into a facility and retrieving items off the shelves to be delivered to a customer's door. Many people are unaware that this is a very labor intensive process. 80% of warehouses today are still leveraging inefficient manual methods like pick to paper. There is a lot of opportunity to optimize and drive down cost when it comes to these manual processes. Labor accounts for about 55% of the cost of operations, which is then passed down to the customer.

Even though the barcodes themselves don't cost much to manufacture, attaching ARC IDs to every individual item adds up quickly. What's most exciting for Charu about the supply chain today is reimagining more precise methods for optimization. With the technology we have today, she shares that we can do much smarter walk optimization. Pure software infrastructure and technology is valuable for removing manual tasks before the operator ever reaches the floor. Ox has been decreasing prices of their hardware by working directly with manufacturers to offer devices as a service as a business model. They offer different mounting devices such as hats, glasses and headbands. Currently, they are focused on serving the enterprise and mid-market companies, because they believe there is a huge benefit to be had by their 5.5 billion employees.

Charu has been featured on the Forbes 30 Under 30 list, is the CEO of a company and is doing large revenue-based types of work at the age when many entrepreneurs are just getting started. She highlights a few of the people who have been instrumental in her journey. Pioneering this new concept of human-centered automation is so important for concepts like equity in the world, and this is just the beginning.

Key Takeaways:

0:29 - Introduction to this episode of Hanselminutes.

1:03 - Why Arkansas?
2:30 - Explaining order picking.
5:33 - Real life example of Ox's efficiency.
8:18 - The barrier of infrastructure costs on ID adoption.
10:23 - Leveraging accuracy.
15:26 - Driving down hardware costs at Ox.
19:20 - Head weight vs. external computers.
23:23 - What made Charu feel she could succeed in her pursuits?

Links:

Learn more about [Charu Thomas](#).

Read Charu's paper on order picking [here](#).

Learn more about the Association for Computing Machinery (ACM) at acm.org.

Learn more about the ACM ByteCast podcast at acm.org/bytecast.

Tags:

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