INNOVATIVE AGRITECH EXPERT

### TO WHOM IT MAY CONCERN,

As an ambitious agritech entrepreneur and dedicated educator, I, Boaz Berhanu, have devoted my life to leveraging the transformative potential of artificial intelligence to reshape the agricultural landscape worldwide. My journey, marked by the establishment of multiple Al-based agritech startups, the mentoring of emerging innovators, and the pursuit of cutting-edge research, embodies my unwavering determination to empower future generations and revolutionize the agricultural sector.

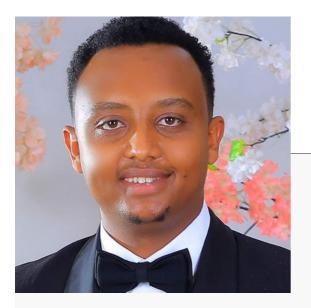
Throughout my career, I have developed a diverse portfolio of innovative solutions, including applications for coffee disease detection, devices for crop recommendation based on soil analysis, and drone technologies that address the challenges faced by smallholder farmers in Ethiopia and beyond. My accomplishments have not gone unnoticed, as I have been honored with over ten prestigious national and international awards, celebrating my steadfast dedication to making a tangible impact in the world of agriculture.

My time as a Mandela Washington Fellow at Purdue University allowed me to further refine my leadership skills and gain invaluable insights into global business incubation. This experience has enriched my understanding of the collaborative power of technology and agriculture, driving me to pursue even greater heights of achievement.

By sharing my passion and expertise, I seek to ignite a spark in others, inspiring them to join me on this journey towards cultivating a sustainable, efficient, and thriving future for agriculture across the globe. As I continue to grow as a leader and innovator, I am eager to embrace new challenges and forge partnerships with those who share my vision for a brighter agricultural future.

SINCERELY,





## INNOVATIVE AGRITECH EXPERT

#### PROFILE

Boaz Berhanu is a driven agritech entrepreneur and educator with a passion for utilizing artificial intelligence to revolutionize the agricultural sector in East Africa. With experience in founding multiple Al-based agritech startups, mentoring students, and conducting cutting-edge research, Boaz is dedicated to empowering the next generation of innovators and transforming agriculture in the region.

### CONTACT

251911086178

www.deboengineering.com

Jimma University, Jimma, Ethiopia

#### SKILLS

- Al Expertise
- · Machine Learning
- Computer Vision
- Software Development
- Entrepreneurship
- Leadership
- · Research & Teaching
- · Project Management
- Communication Skills

#### WORK EXPERIENCE

### CTO and Co-Founder - Jimma, Ethiopia

Debo Engineering PLC

February 2019- Present

Co-founded Debo Engineering with Jermia Bayisa, an Al-based agritech company focused on developing products and software to increase crop productivity in East Africa. Led the development of a flagship Al-powered mobile app for plant disease detection, receiving national and international recognition.

### **Lecturer and Researcher - AA Ethiopia**

Jimma University

June 2019- Present

Taught courses related to Computer Engineering, implemented innovative teaching methods to enhance student competitiveness, and mentored over 20 students to create their own successful startup companies.

### Co-founder and External Communication Expert- AA Ethiopia

Omishtu-Joy

June 2021- July 2022

Co-founded Omishtu-Joy, a startup company selling a soil testing product that helps farmers determine the best crop for their land within 5 minutes. Represented Ethiopia in an innovation competition in Kenya, winning a \$25,000 prize from the World Bank

### Intern - AA, Ethiopia

Great Commission Ethiopia

Jan 2017 - May 2017

Worked as an intern in the Virtual Lead Movement office, developing software tools for various religious purposes, including applications to help youth avoid pornography, a website to locate the nearest church and other applications.

### Director, Al Center- Jimma, Ethiopia

Jimma University

Jan 2022 - Present

Leads the AI Center at the university, overseeing research projects, fostering collaborations, and promoting the development and application of artificial intelligence in various fields.

### LANGUAGES

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English

Afan Oromo

# INNOVATIVE AGRITECH EXPERT

### EXPERTISE

- Agritech entrepreneurship -Founding multiple Al-based startups focused on improving agricultural productivity and providing innovative solutions for the East African agricultural sector.
- Al-driven innovations Developing cutting-edge Al technologies, including computer vision and machine learning applications, to address real-world agricultural challenges and improve farmers' livelihoods.
- Mentorship and education -Lecturing at Jimma
   University, empowering students to create their own startups, and fostering a culture of innovation and entrepreneurship through hands-on guidance and mentorship.

### REFERENCES

- 1. Woubakal Beyene U.S. Embassy Addis Ababa Email: beyenewt@state.gov
- 2. Gary R. Burniske Purdue University Email: grburniske@purdue.edu
- Lonni Kucik Purdue University Email: lkucik@purdue.edu
- 4. Dan Dawes Purdue University Email: dddawes3@gmail.com
- 5. Dawit Mulugeta Coffee Innovation Fund Project Manager GIZ Email: dawit.mulugeta@giz.de
- 6. Dr. Kinde Anlay Jimma University Email: kinanlay@gmail.com
- 7. Jermia Bayisa Debo Engineering Email: jarmbayisa@gmail.com

#### EDUCATION

### **Agricultural Leadership Training - USA**

**Purdue University** 

June 2022 - August 2022

Awarded the 2022 Mandela Washington Fellowship and attended leadership training from top experts in the field. Visited prominent business incubators in Chicago and Indianapolis, and received a recognition certificate from Antony Blinken, United States Secretary of State.

### **MSc in Computer Engineering - Ethiopia**

Jimma University

September 2018 - November 2021

Received a scholarship for an innovative BSc final year project and completed MSc in Computer Engineering. Developed a real-time problem solver thesis titled "Albased Pornographic Video Classification", leading to the creation of a real-time pornographic video detector for Ethiopian websites.

## **BSc in Electrical and Computer Engineering - Ethiopia**

Jimma University

September 2012 - June 2017

Specialized in Computer Engineering and developed an innovative final-year project titled "Multi-purpose Drone for a Smart City", which earned a scholarship for MSc studies.

### Higher Diploma Program - Ethiopia

Jimma University

August 2021 - May 2022

Completed the Higher Diploma Program for teachers in higher education, covering understanding higher education, managing learning and assessment, and conducting action research on the educational system of Jimma University.

INNOVATIVE AGRITECH EXPERT

# **Projects**

- Multi-purpose Drone for a Smart City, Jimma University (2017) Developed an innovative final-year project, which led to receiving a scholarship for MSc studies.
- 2. Al-based Pornographic Video Detection from Video Transmission, Jimma University (2018-2021) Conducted research and developed a real-time pornographic video detector for Ethiopian websites to enable content filtering.
- Malaria Diseases Detection using Image Processing, Jimma University (2018-2019) Developed a solution for detecting malaria in patients using image processing technology.
- 4. Al-based Coffee Disease Detection and Prevention Application, Debo Engineering (2019-Present) Designed and implemented an Al solution for detecting and preventing coffee diseases.
- Al-based Livestock Disease Detection and Livestock Management, Debo Engineering (2019-Present) Developed an Al solution for detecting livestock diseases and managing livestock populations.
- 6. Al-based Crop Recommendation using Smart Soil Analysis, Omishtu Joy (2021-Present) Co-founded a start-up and created an Al-based solution for recommending suitable crops based on soil analysis.

### AWARDS

- Best University Project Winner in Jimma University, Addis Ababa (2017) Awarded for the best final-year project at Jimma University.
- 2. Green Innovation Award Winner, Addis Ababa (2019) Recognized for contributions to sustainable and environmentally friendly innovation.
- 3. MEST Africa Community Vote Winner, Addis Ababa (2020) Voted as the top innovation by the MEST Africa Community.
- 4. KOICA MinT Innovation Award Winner, Addis Ababa (2021) Honored for exceptional innovation by the Korea International Cooperation Agency (KOICA) and the Ministry of Innovation and Technology (MinT).
- 5. Best Innovation from All Ethiopian Universities Award, Addis Ababa (2021) Received the award for the best innovation among all Ethiopian universities.
- 6. Bruh nu UNDP Competition Award Winner, Addis Ababa (2021) Recognized for outstanding innovation and entrepreneurship by the United Nations Development Programme.
- Coffee Innovation \$50,000 Winner, Addis Ababa (2021)
   Awarded a \$50,000 prize for significant innovation in the coffee industry.
- 8. Sankalp World Bank Innovation Winner, Nairobi (2022) Won the Sankalp World Bank Innovation competition, receiving a \$25,000 prize for agritech innovation.
- 9. Mandela Washington Fellowship Alumni MWF2022, West Lafayette (2022) Awarded the prestigious Mandela Washington Fellowship, recognizing promising young African leaders.