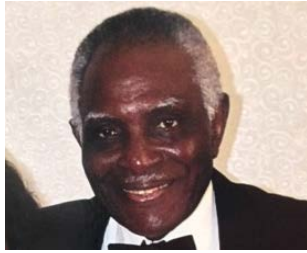




A Division Of The BlackStar Companies



Clarence McCollum, Sr.

Title

Senior Technical Advisor

Years of Experience

45 years

Education/Certifications

Masters of Computer Science (George Washington University, 1974)
Bachelors of Electrical Engineering (George Washington University, 1971)
Certified, Solar Photovoltaic and Wind System Design, (Frostburg State University, 2010)
Certificate, Solar Power System Design, Intelligent IMAGE, Inc. 2004
Certificate, Solar Power Grid Optimization, Intelligent IMAGE, Inc. 2004

Areas of Expertise

Expertise in power distribution, electronic component design, & design and implementation of renewable power source systems.

Background

As an innovator and trailblazer in electronics engineering, Clarence McCollum, Sr., started his professional career as a design engineer with IBM and after 15 years launched his own technology firm. Mr. McCollum established CBM Electronics, Inc. in 1977 to foster the professional abilities of minorities in the field of engineering & electronics. He has amassed over four decades of experience designing solutions with electronic components and uses this expertise to guide the company's product design and product applications. He works directly with Chief Technology Officer in order to develop in house techniques for advanced energy analysis. Developed a protocol first of its kind energy assessment tool that provides market leading capabilities for energy utilization mapping.

Professional Experience

Senior Consultant

BlackStar Energy Group (February 2017 – Present)

Activities:

Senior technical and business advisor for the company. Assists with the development and implementation of the strategic vision of the company with the primary goal of commercialization of new energy analysis protocol and the power utilization requirements thereof. Utilizes extensive background in signal processing and microcode design of electronic systems in order to assist with power supply design for all energy consuming products within a facility. Working on a design for internal control, based on room occupancy, of power supply in order to mitigate unwanted illumination periods.

Accomplishments:

Optimized power supply for minimum thermal signature and functionality in order to achieve maximum lighting operation. Developed design tool and associated benchmark for assessing electricity requirements for each new product configurations thus allowing for a consistent power requirement advantage over all other lighting

Dallas

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Suite 108
Lewisville, Texas 75056

Detroit

15918 W. McNichols
Suite 200
Detroit, Michigan 48235

Atlanta

101 Colonnade Dr.
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Peachtree City, Georgia 30269

products in the marketplace and; most importantly, ensuring that all of our products maintain an analogous thermal footprint.

Founder/Chief Engineer

CBM Electronic Systems, Inc. (1977 – 2000)

Founded premier minority engineering & electronics firm in the Washington, DC Metropolitan Area. Performed system integration and signal process design work for the Department of Defense and the US State Department. System design expertise permitted three major project engagements with Federal Government. Featured project included the design and implementation of the first local area network (LAN) system installed in the US Pentagon. Additional engagements included:

Project Name: Army Material Command Local Area Network Installation (Phase 1)

- Responsible for the installation and checkout of Satellite down-link antenna for the U.S. Information Agency (USIA).
- Responsible for the Design, Construction and Installation of a Microwave line-of-sight link for the U.S. Information Agency (USIA)
- Designed, installed and tested the Broadband dual cable Local Area Network Systems at 800 workstations. Project included integration of Agency equipment PC's, terminals, micro's, mini's and mainframes. Bridged existing Ethernet system into LAN and linked to Pentagon.

Project Name: Army Material Command Local Area Network Installation (Phase 2)

- Designed and installed remaining 350 workstations for USIA.
- Performed system verification and power utilization testing in order to confirm optimal system functionality.