

Charles E. Coleman II

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SUMMARY

Morehouse College Expected Degree: B.S. in Applied Physics
Expected Graduation Date: May 2023

North Carolina Agricultural & Technical State University: B.S. in Bioengineering
Expected Graduation Date: May 2023

EDUCATION

Morehouse College | Atlanta, GA
GPA: 3.74

August 2018 – August 2021

Relevant Courses from Morehouse College:

- ◇ **Mathematics:** Calculus I, II, and III (Fall 2018, Spring 2019, Fall 2020), Linear Algebra (Spring 2020), Ordinary Differential Equations (Fall 2020)
- ◇ **Engineering:** Engineering Graphics (Fall 2018), Engineering Statics (Spring 2020), Engineering Dynamics (Spring 2021), Engineering Design (Spring 2021)
- ◇ **Physics:** Mechanics (Spring 2019), Electricity & Magnetism (Fall 2019), Optics & Modern Physics (Spring 2020), Thermodynamics (Fall 2020), Mathematical Physics (Fall 2020)
- ◇ **Project Management:** Project Management in STEM (Spring 2021)

Technical Skills: Fusion360, Word, Excel, PowerPoint, Google Docs, Google Slides, Google Drive, Origin

Personal Skills: Critical thinker, problem-solver, hard-worker, passionate, interpersonal interaction, punctuality

Honors: Alpha Lambda Delta Honor Society Member, Honor Roll, Member of Dean's List, Morehouse College Scholarship Recipient, Mt. Ennon Baptist Church Scholarship Recipient, Top Scholar of Class of 2022, Member of National Society for Leadership and Success, National Academy of Future Physicians and Medical Scientists Award of Excellence Award, Dual Degree Engineering Program Scholarship Recipient, ARCS Foundation Scholarship Recipient

College Activities: Dual-Degree Engineering Program, Member of National Society for Leadership and Success, Member of AUCMakeWay

Leadership Roles: Programs Director & Vice President of AUCMakeWay, Morehouse College Senator for AUC Chapter of National Society of Black Engineers

North Carolina A&T State University | Greensboro, NC
GPA: N/A

August 2021 -- Present

EXPERIENCE

Work Experience:

Undergraduate Research Assistant

March -- August 2021

- ◇ Analyzed polyhydroxybutyrate (PHB) and poly(3-hydroxybutyrate-co-3-hydroxyvalerate) (PHB-V) to create FTIR spectra and ATR images using the Perkin Elmer Spotlight 400 FT-IR System to analyze the samples.
- ◇ Normalized data to create high quality spectra that will be used in future presentations, papers, etc.

Intern at Los Alamos National Laboratory

Summer 2020

- ◇ I have a published presentation entitled, "BioManIAC Investigating the degradation of PHA biopolymers and their derivatives". This presentation details alternative plastics to use in common plastic production for water bottles, candy wrappers, etc.

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- ◇ I performed a literature review regarding thermal degradation of polyhydroxybutyrate (PHB) and other bio-based polymers. I studied polymers that were tested in various conditions from anaerobic sludge, to being placed in a furnace at 1000°C.
- ◇ I was an author on a paper that describes the degradation of PHB and PHB-V, a PHB-type polymer. In this paper the Chemistry team on the project used a multitude of techniques such as Fourier-transform infrared spectroscopy (FT-IR), thermogravimetric analysis (TGA) and mass spectroscopy, etc. These techniques allowed our team to determine the chemical signature of the PHB and PHB-V samples, observe the temperature at which they degraded and characterize the thermal composition of the samples.
- ◇ I have a published presentation entitled, “BioManIAC Investigating the degradation of PHA biopolymers and their derivatives”. This presentation details alternative plastics to use in common plastic production for water bottles, candy wrappers, etc.
- ◇ I performed data processing using Origin software on TGA and FT-IR data that was used in multiple presentations and papers stemming from the BioManIAC project.

Intern at The Coleman Group, Inc.

Summer 2018 & 2019

- ◇ I created and edited proposals for government agencies such as the US Naval Academy, IPPS-A, Center for Disease Control (CDC), and the Department of Justice (DOJ).
- ◇ I understand the punctuality and dictation of documents such as Requests for Proposals (RFP), Request for Information (RFI), Request for Quote (RFQ), Modifications, Technical Proposals, etc.
- ◇ I have experience searching within GovWin, eBuy, GSA 8aStars II, and FedBizOpps to search for opportunities and contracts related to the public sector of the workforce. I also analyzed contracts within those entities to find opportunities the company could possibly pursue and submit a proposal for.
- ◇ I deconstructed an outdated file system for the company that was full of old files, empty folders, and misplaced information. I created a modern and simple filing network infrastructure so that employees can quickly access the desired file in less than 5 “clicks”.
- ◇ I worked on multi-million-dollar proposals submitted to the government and created a new way to edit collaborative documents. Instead of each individual employee working on their own ideas and comments, I was able to show a document to the entire team concurrently so real-time modifications to the document could be applied. This method reduced the archaic time of taking a whole workday to edit a proposal to less than 2-3 hours.