

Zakiyyah A. Brown

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EDUCATION

University of Southern California (USC)
Los Angeles, California

Ph.D., Environmental Engineering, 2018-Present. GPA: 3.49

M.S., Environmental Engineering, 2018-2021. GPA: 3.49

North Carolina Agricultural and Technical State University (NC A&T)
Greensboro, North Carolina

B.S., Civil Engineering, 2014-2018. GPA: 3.78

Waste Management Certificate, 2018.

RESEARCH

Daniel L. McCurry Lab Group

Los Angeles, CA

Ph.D. Student Researcher

August 2018-Present

- Investigating formation of chlorinated substances in drinking water treatment processes
- Applying analytical chemistry techniques to minimize disinfection by-products in wastewater reuse
- Developing a new non-adsorptive method to detect and measure unregulated total organic halogens

NC A&T Research Team

Greensboro, NC

Undergraduate Research Assistant

January 2017-April 2018

- Constructed biodegradable water remediation polymers of varying chemical composition
- Conducted kinetic release studies in order to derive pellets' degradation calibration curves
- Presented poster for NC A&T Spring 2018 Undergraduate Research Symposium
- Created annotated inventory lists for laboratory materials present in each of 3 lab rooms

North Carolina A&T State University

Greensboro, NC

Intern (Mathematics Department)

May 2015-July 2015

- Participated in TALENT-21 Program's Biomathematics Summer Institute
- Investigated the Galton Watson branching process model's application to cell proliferation
- Produced written report, poster, and oral presentation

INTERNSHIPS

ExxonMobil Environmental Services

Linden, NJ

Environmental & Property Solutions (E&PS) Intern

June 2018-August 2018

- Strategized remediation plan for groundwater conservation system fouling at local refinery
- Authored benchmark for consultant contracting and site safety supervision of \$1,000,000+ projects
- Collaborated with 5 interns to evaluate work-hour value of E&PS stewardship process

ExxonMobil Research and Engineering

Spring, TX

Cost Engineering Intern

May 2017-August 2017

- Improved existing 2007 workbook tool in flexibility, sustainability, and functionality
- Integrated feedback from over 20 cost engineers in order to surcharge usability
- Organized training material to communicate tool use proficiency of over 2,000 cost engineers

Prince George's County Planning Department

Upper Marlboro, MD

Intern I (Strategy & Implementation Division)

June 2016-August 2016

- Assisted with completing \$100,000+ grant applications for community development
- Originated over 10 community engagement deliverables presented at Maryland-National Capital Park and Planning Commission events
- Aided in evaluation of draft 30% design plans for the Central Avenue Connector Trail

AWARDS & FELLOWSHIPS

USC Viterbi Admission & Student Engagement Outstanding Mentor Award

May 2020

National Science Foundation Graduate Research Fellow

April 2019-Present

National GEM Consortium Full Fellow

April 2018-Present

USC Vice Provost Diversity, Inclusion and Access Fellow

August 2018-Present

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| National Action Council for Minorities in Engineering Scholar | April 2015-May 2018 |
| ENGAGE 2 BE Engineers Mentoring Program Fellow | August 2015-May 2018 |
| ExxonMobil Future Leaders Academy Scholar | October 2015 |
| NC A&T College of Engineering NAMASKAR Award Nominee | December 2017 |
| First Place – ASCE Surveying Competition | March 2016 |
| Traverse/Measurement Award – ASCE Surveying Competition | March 2016 |

LEADERSHIP

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| National Society of Black Engineers (NSBE) Graduate Student Liaison | May 2019-May 2021 |
| Viterbi Graduate Student Association NSBE Ambassador | August 2020-May 2021 |
| Viterbi Summer Institute Research Mentor Consultant | June 2020-July 2020 |
| Women in Science and Engineering Incoming Ph.D. Student Mentor | May 2019-May 2020 |
| USC Viterbi School of Engineering Incoming Ph.D. Student Mentor | May 2019-May 2020 |
| USC Viterbi School of Engineering Ambassador | May 2019-May 2020 |
| USC Viterbi School of Engineering SHINE Mentor | June 2019-July 2019 |
| NC A&T College of Engineering Ambassador | March 2016-May 2018 |
| Alpha Delta Epsilon Civil Engineering Honor Society Vice President | April 2017-May 2018 |
| Tau Beta Pi Engineering Honor Society Vice President | December 2017-May 2018 |
| NSBE Academic Excellence Chair | May 2017-September 2017 |
| College of Engineering Makerspace Super User | May 2017-September 2017 |
| Aggie Livewire President | April 2016-February 2017 |
| Aggie Livewire Recording Secretary | April 2015-April 2016 |
| Aggie Engineering Toastmasters Vice President of Membership | April 2015-April 2016 |

AFFILIATIONS & SOCIETIES

American Society of Civil Engineers, American Water Works Association, NSBE, Society of Women Engineers, Tau Beta Pi Engineering Honor Society

VOLUNTEER EXPERIENCE

Big Sunday, Cove Creek Gardens, Inc., Greensboro Beautiful, Greensboro Farmers Curb Market, Greensboro Historical Museum, International Civil Rights Center and Museum, Plan International USA, Society for Prevention-Cruelty of the Triad, Tiny Houses Greensboro, Welfare Reform Liaison Project, Inc., The Volunteer Center of Greensboro

TECHNICAL SKILLS

AutoCAD 2018, ChemDraw Professional 16.0, Civil Land CAD 2017, MATLAB, Microsoft Office Suite, Firefox, Google Chrome, Internet Explorer, Visual MINTEQ 3.1