#### 1. Name

Tanjina Afrin

## 2. Education – degree, discipline, institution, year

- -Ph.D., Civil Engineering, Clemson University, SC, 2016
- -M.Sc., Environmental Engineering, Bangladesh University of Engineering and Technology, Bangladesh, 2012
- -B.Sc., Civil Engineering, Bangladesh University of Engineering and Technology, Bangladesh, 2009

## 3. Academic experience – institution, rank, title, when, full time or part time

- -Virginia Military Institute (VMI), Associate Professor, 2023-Present, full time
- -Virginia Military Institute (VMI), Assistant Professor, 2017-2023, full time
- -Tri-County Technical College, Adjunct Instructor, 2016 (Fall Semester), part time
- -Clemson University, Graduate Teaching Assistant, 2013-2016, full time.
- -Stamford University Bangladesh, Lecturer, 2010-2012, full time

# 4. Non-academic experience – company or entity, title, brief description of position, when, full time or part time

- -Bangladesh Network office for Urban Safety. Research Engineer. Conducted research on urban fire safety. April 2010- September 2010. Full Time.
- -Ever way Engineers Limited, Bangladesh. Design Engineer. Performed structural designs of residential and industrial buildings. 2009-2010. Full Time.

### 5. Certifications or professional registrations

-Professional Engineer, North Carolina, No. 052880, 2021

#### 6. Current membership in professional organizations

- -American Society of Civil Engineers (ASCE)-Associate Member
- -American Society of Engineering Education (ASEE), Society of Women Engineers (SWE) and Tau Beta Pi Honor Society-Member

#### 7. Honors and awards

- -Thomas Jefferson Teaching Award, VMI, 2022
- -ASCE ExCEEd Fellowship, 2017

## 8. Service activities

- -VMI Center for Undergraduate Research- Assistant Director (2023-Present)
- -VMI Undergraduate Research Committee Chair (2023-Present), Member (2017-2022)
- -VMI Innovation Programming Advisory Committee- Member (2023-Present)
- -VMI Undergraduate Research Symposium, Moderator and Judge (2017-Present)
- -Environment Virginia Symposium, Reviewer and Moderator (2018-Present)
- -ASCE Journal of Hydraulic Engineering and ASEE Conference-Reviewer

## 9. Publications and presentations from the past five years – title, co-authors if any, where published and/or presented, date of publication or presentation

- "Engineering application outreach projects in a college town in the USA." Afrin, T., Martin, R., Timmes, T., and Swenty, M. (2023). American Society of Civil Engineers-International Perspective on Water Resources and Environment (ASCE-IPWE), Dhaka, Bangladesh
- "Entry-level mathematics and engineering course grades as predictors of success in higher-level engineering courses." Martin, R., Afrin, T., Timmes, and R. Wilkins, (2023). American Society of Engineering Education -Southeastern Section Conference, Fairfax, VA.
- "The roof is growing-Middle school students' attitude and perception towards Green Roof." Afrin, T. (2022). American Society of Civil Engineers-Environmental and Water Resources Institute (ASCE-EWRI) World Congress, Atlanta, GA.
- "Highlighting Cultures, Civilizations, and Diversity in Historical Civil Engineering Achievements." Afrin, T., R. L. Martin, R. Wilkins, M. Swenty, & T. Timmes. (2022). American Society of Engineering Education -Southeastern Section Conference, Charleston, SC.
- "Numerical investigation of a free overfall from a rectangular pipe for various upstream conditions." Afrin, T., Kaye, N.B., & Khan, A.A., (2021). Journal of Hydraulic Engineering, ASCE, 147(9)
- "A Novel Approach for Integrating the New ABET Student Outcomes (SOs) and Early Impacts on SOs during the COVID-19 Pandemic." Jung, J., Afrin, T., & Timmes, T. (2021). American Society of Engineering Education-Southeast Section conference (Virtual).
- "IF Programming Concepts are eliminated from the Curriculum THEN Civil Engineers will ..." Newhouse, C., Afrin, T., Ramniceanu, A., & Swenty, M., (2020). American Society of Engineering Education-Southeast Section conference, Auburn, AL.
- "Curricular Predictors for Success on the Civil Fundamentals of Engineering (FE) Exam." Timmes, T., Newhouse, C., Afrin, T., Ramniceanu, A., & Swenty, M., (2020). American Society of Engineering Education-Southeast Section conference, Auburn, AL.
- "Evaluation of traffic and weather characteristics' effect on pollutants in local neighborhood." Afrin, T., Suvannachote, T., Idewu, W.I., & Jung, J.K., (2019). American Society of Civil Engineers-Environmental and Water Resources Institute (ASCE-EWRI) World Congress, Pittsburgh, PA
- "Predicting and preventing perception problems in freshman engineers." Afrin, T., Jung, J.K, Swenty, M., Ackerman, P., Timmes, T., & Newhouse, C., (2019). American Society of Engineering Education-Southeast Section conference, Raleigh, NC.
- "Numerical investigation of a free overfall from a rectangular pipe for various inlet conditions." Afrin, T., Kaye, N.B., & Khan, A.A. (2019). American Society of Civil Engineers-Environmental and Water Resources Institute (ASCE-EWRI) World Congress, Pittsburgh, PA, U.S.A.
- "Effectiveness of green roofing and bio retention basins on storm water quality in Lexington, VA." Afrin, T., & Lamade, J.S. (2019). American Society of Civil Engineers-Environmental and Water Resources Institute (ASCE-EWRI) World Congress, Pittsburgh, PA

#### 10. Most recent professional development activities

- -Academic Leadership for Women in Engineering Program, SWE, 2023-2024
- -Presenter-ASEE-SE conference, 2021-2023, ASCE Conference, 2018, 2019, 2022, SC
- Water Resources Conference, Columbia, SC, 2016, 2018
- -Poster Presenter-ASCE Conference, 2019