CURRICULUM VITAE

1. **Family name:** OUBEIDILLAH
2. **First names:** Abdoul
3. **Education:**

Institution [Date from - Date to]	Degree(s) or Diploma(s) obtained:
The University of Tennessee, Knoxville, TN, USA [2008 – 2011]	**Ph.D. in Civil and Environmental Engineering:** Water forecasting, statistical, hydrological and hydraulic modelling, flood and drought preparedness and resilience
The University of Wyoming, Laramie, WY, USA [2007 – 2008]	**Masters of Sciences in Civil Engineering:** hydro-climatology, climate change and variability
Minnesota State University, Mankato, MN, USA [1996 – 2000]	**Bachelor's Degree in Electrical Engineering:** Communications

4. **Language skills:** Indicate competence on a scale of 1 to 5 (1 - excellent; 5 - basic)

Language	Reading	Speaking	Writing
English	1	1	1
French	1	1	1

5. **Membership of professional bodies:**
   American Geophysical Union
   American Society of Civil Engineers

6. **Key qualifications:**
   - *Experience in reporting research and development* with good publication record for writing scientific papers, reports and journal articles in various areas including flood and drought forecasting, remote sensing, sustainability, disaster mitigation, and water resources development.
   - *Facilitation, Capacity Building and Knowledge Management* with the preparation and delivery of seminars and workshops in various subjects including Disaster Risk Reduction at local and international level in a multicultural and multilingual context. Writing of reports, proposals, and strategy documents
   - *Data collection, Monitoring and Evaluation, and Stakeholders Engagement* overseeing the development, execution, and evaluation of data collection project, engaging and getting support from stakeholders, and conduct validation workshops.
   - *Speaker at local and international conferences* in both fluent French and English
   - *Experience in Africa* conducting various projects as listed below. **Member of the Africa Science and Technology Advisory Group (Af-STAG) of the African Union on Disaster Risk Reduction (DRR) in Africa.**
   - *Selected relevant web links (workshop, blog, press articles)*
     - Video from the Interior Ministry of Comoros: https://www.facebook.com/Miidiofficiel/videos/1985489568366317
     - Magazine of the OIF/IFDD: http://www.ifdd.francophonie.org/ressources/ressources-pub-desc.php?id=743
     - My own data collection and dissemination website: https://www.oubeidillah.com/hydro/
     - Worldbank OpenDRI project blog: https://opendri.org/mapping-the-comoros-archipelago/
7. **Other skills: (e.g. Computer literacy, etc.)**
   Computer proficiency: Webpage design, Audio-Video editing, Microsoft Office, MS Project, and database management
   Experience in project management as a national project coordinator and principal investigator in development and research project
8. **Present position:**
   Assistant Professor: The University of Texas, Rio Grande Valley
9. **Years within the firm:**
   4 years
10. **Specific experience in Africa:**

Country	Date from - Date to
East Africa	March 2021 – June 2021: Analyze the challenges and opportunities for strengthening the role of science and technology and citizen science approaches in disaster risk reduction.
Comoros	Dec 2020 – March 2021: Assessment of water resources and Evaluation of Hydro-meteorological risks related to climate change and urban development in the island of Moheli.
Cameroon	Dec 2018 – Feb 2019: Development of a master plan for water resources sustainable development funded by the FAO
Comoros	Apr 2018: Prepare and deliver an international workshop on Disaster Risk Reduction for small islands developing states (SIDS) sponsored by the OIF
Comoros	May 2016 – Apr 2017: Capacity building and data collection for disaster risk reduction and open data for resilience sponsored by the World Bank
Comoros	Jun 2010 – August 2010: Prepare and deliver a seminar on the impacts of climate change and variability with funds from a research fellowship
Comoros	Aug 2006 – Jul 2007: Coordinated development projects for USAID and the US Army civil affairs

11. Professional experience:

Date from - Date to	Location	Company	Position	Description
2018-Present	Edinburg, TX, USA	The University of Texas, Rio Grande Valley	Assistant Professor, Civil Engineering Department	Tenure-track faculty teaching and conducting research in water resources engineering, modelling, as well as hydro-meteorological disaster mitigation, monitoring and evaluating project executions
2021	East Africa	UNESCO	Consultant	Analyze the challenges and opportunities for strengthening the role of science and technology and citizen science approaches in disaster risk reduction. Provide policy recommendations for actions on how to promote and strengthen inter-country learning, knowledge sharing and cooperation on citizen science and application of modern technologies for disaster risk reduction and management
2020	ONLINE	OIF/IFDD	Knowledge development Consultant	Develop training videos and support material for a MOOC on water supply development and employability.
2020	Moheli, Comoros	Suez/AFD	Consultant	Evaluate water resources and hydro-meteorological risks related to climate change and urban development of the island of Moheli and provide sustainable and environmentally sound recommendations
2018 – 2019	Yaounde, Cameroon	UN FAO	Consultant	Develop a master plan document for the development and sustainability of water resources as well as conducting a validation workshop
2018/04	Moroni, Comoros	OIF / IFDD	Consultant	Develop and conduct an international training workshop for disaster risk reduction for Small Islands Developing States (SIDS), develop an action plan for climate change adaptation to disaster risk mitigation and vulnerability reduction, and write a report
2016-2017	Moroni, Comoros	The World Bank	Consultant	Conduct training workshop for open data for climate change resilience, collect data, develop risk maps, and develop an open data sharing platform for early warning and disaster management
2015-2017	Tuscaloosa AL, USA	NOAA National Water Center	Associate Scientist	Development of the first US National Water Model for water prediction and the development of a strategy document on a hyper-resolution flood mapping project
2013-2015	Tuscaloosa AL, USA	The University of Alabama Environmental Institute	Research Engineer	Develop decision support tools for extreme events management causing water disruption, lead the construction of a $600,000 USD disaster operation center, as well as conducting research in Flood damage prediction
2011-2012	Oak Ridge, TN, USA	Oak Ridge National	Post-Doctoral	Lead the development of a national hydrological model for climate change impact assessment on water resources, ecology, and hydropower
2006-2007	Moroni, Comoros	US Army Civil Affairs CJTF Horn of Africa	Consultant	Support development projects as a liaison between the stakeholders and coordinating project activities and logistics
2006-2007	Moroni, Comoros	EDC/USAID	Consultant / Country Project Coordinator	Develop and implement country wide activities to incorporate technology in the education curriculum to support teachers and communities
2004-2006	Montreal, Canada	Computer Sciences Corporation	Technical Support Engineer	Support company remote clients operations to minimize disruptions and provide them with solutions to technical issues
2002-2004	Montreal, Canada	IBM Canada	Technical Support Engineer	Support company remote clients operations to minimize disruptions and provide them with solutions to technical issues

12. Honours and Awards

Present:	Member of the Science and Technology Advisory Group of the African Union on disaster risk reduction in Africa	
Present:	International Commissioner of the Comoros National Scout Association	
2019:	World Scout Jamboree Comoros Contingent Leader	USA
2016:	Recognized for significant contributions,	NOAA National Water Center
2014:	Significant Event Award (National Hydropower Program),	Oak Ridge National Lab
2010:	W.K. McClure Scholarship for the Study of World Affairs,	UTK Travel Grant to Africa
2009:	Ivanhoe Foundation Graduate Fellowship,	Water Research Grant
1998:	Student Government Senator for the College of Sciences and Engineering,	Minnesota State Uni, Mankato
1996:	USAID African Training for Leadership and Advanced Skills Fellowship	USAID

13. Publications

Navarro L, Mahmoud A, Ernest A, Oubeidillah A, Johnstone J, Chavez IRS, Fuller C. Development of a Cyberinfrastructure for Assessment of the Lower Rio Grande Valley North and Central Watersheds Characteristics. Sustainability. 2021; 13(20):11186. https://doi.org/10.3390/su132011186

Oubeidillah, A, G. Tootle, and V. Lakshmi. 2019. Impacts Of Beetle Kill On Modeled Streamflow Response In The North Platte River Basin. *International Journal of Engineering Technologies and Management Research,* 6(3), 27-39. DOI: 10.5281/zenodo.2619488.

Oubeidillah, A, G. Tootle, and T. Piechota, 2019. Incorporating Antecedent Soil Moisture Into Streamflow Forecasting. Hydrology (ISSN 2306-5338) (In Review)

Gutenson, J.L., A.N.S. Ernest, A.A. Oubeidillah, L. Zhu, X. Zhang,and S.T. Sadeghi, 2017. Rapid Flood Damage Prediction and Forecasting Using Public Domain Cadastral and Address Point Data with Fuzzy Logic Algorithms. Journal of the American Water Resources Association 54(1):104-123. https://doi.org/10.1111/1752-1688.12556.

Gutenson, J.L., A.A. Oubeidillah, A.N.S. Ernest, L. Zhu, X. Zhang,and S.T. Sadeghi, 2016. Investigating Uncertainty in Developing Regional Building Inventories for Flood Damage Prediction. Natural Hazards Review, 18(3), https://doi.org/10.1061/(ASCE)NH.1527-6996.0000240.

Gutenson, J., Oubeidillah, A., Hicks, P., Durham, L., Ernest, A., Zhu, L.,and Zhang, X., 2015: Using HAZUS-MH and HEC-RAS to Evaluate Real World Flooding Events in the Upper Alabama River watershed, World Environment and Water Resources Congress: Floods, Droughts, and Ecosystems, 1607–1627, 2015.

Gutenson, J. L., Ernest, A. N. S., Fattic, J. R., Ormsbee, L. E., Oubeidillah, A. A., and Zhang, X., 2015: Water Expert: a conceptualized framework for development of a rule-based decision support system for distribution system decontamination, Drink. Water Eng. Sci., 8, 9-24, doi:10.5194/dwes-8-9-2015.

Oubeidillah, A. A., S.C. Kao, M. Ashfaq, B. S. Naz, and G. Tootle. 2014. A Large-Scale, High-Resolution Hydrological Model Parameter Dataset for Climate Change Impact Assessment for the Conterminous United States. *Hydrology and Earth System Sciences,* 18:67–84.

Anderson, S., G. Tootle, A. A. Oubeidillah, S. Parkinson, P. Holbrook, 2013. Long Lead-time Forecasting of Snowpack in the Upper Snake River Basin using Pacific Oceanic-Atmospheric Variability. *Journal of Hydrologic Engineering*.

Marks, J., J. Piburn, G. Tootle, G. Kerr, A. A. Oubeidillah, 2013. Case Study: Estimates of Glacier Mass Loss and Contribution to Streamflow in the Wind River Range, Wyoming, USA. *Journal of Hydrologic Engineering,* DOI: 10.1061/(ASCE) HE. 1943-5584. 0001050

Oubeidillah, A. A., Glenn Tootle & Sally-Rose Anderson (2012): Atlantic Ocean sea-surface temperatures and regional streamflow variability in the Adour-Garonne basin, France*, Hydrological Sciences Journal*,DOI:10.1080/02626667.2012.659250

Anderson, S., A. A. Oubeidillah, G. Tootle, H. Grissino-Mayer and A. Barnett, 2012. Using Pacific Ocean Climatic Variability to Improve Hydrologic Reconstructions. *Journal of Hydrology*, 434:69–77

Oubeidillah, A. A., G.A. Tootle, C. Moser, T. Piechota, K. Lamb, 2011. Upper Colorado River and Great basin streamflow and snowpack forecasting using Pacific oceanic-atmospheric variability. *Journal of Hydrology*, DOI: 10.1016/j.jhydrol.2011.09.030

Lamb, K., T. Piechota, A. A. Oubeidillah, G. Tootle, 2011. Establishing A Basis For Extending Long-Term Streamflow Forecasts In The Colorado River Basin. *Journal of Hydrologic Engineering*, DOI: 10.1061/(ASCE)HE.1943-5584.0000153.

Moser, C., A. A. Oubeidillah G. Tootle, and V. Lakshmi, 2011. A comparison of SNOTEL and AMSR-E snow water equivalent datasets in western U.S. watersheds. *International Journal of Remote Sensing*, DOI:10.1080/01431161.2010.512936

Oubeidillah, A. A., G.A. Tootle, S.T. Gray and T.C. Piechota, 2010. Identification of Pacific Ocean Sea Surface Temperatures influences of Upper Colorado River Basin Snowpack. *Water Resources Research*, 46, W07536.

Soukup, T., A. A. Oubeidillah, G.A. Tootle, S. Wulff and T. Piechota, 2009. Incorporating Climate into a Long Lead-Time Non-parametric Streamflow Forecast. *Journal of Hydrology*, 368(2009), 131-142.

Tootle G.A., T.C. Piechota, A. A. Oubeidillah, W.P. Miller, V. Lakshmi, J.A. Dracup and C. Jerla, 2009. The 2009–2010 El Niño: Hydrologic Relief to U.S. Regions? American Geophysical Union *EOS Transactions*, 90(50), 481-482.

14. Conference Proceedings:

Gutenson, J., Oubeidillah, A., Hicks, P., Durham, L., Ernest, A., Zhu, L., and Zhang, X., 2015: Using HAZUS-MH and HEC-RAS to Evaluate Real World Flooding Events in the Upper Alabama River Watershed. World Environmental and Water Resources Congress 2015: pp. 1607-1627.doi: 10.1061/9780784479162.157

Oubeidillah, A. A.., G.A. Tootle, T.C. Piechota and Cody Moser, 2010. 2009-2010 El-Niño: Predicted Hydrologic Response in the United States. Proceedings of the ASCE-EWRI 2010 Congress, May 16-20, Providence, Rhode Island.

Moser, C., A. A. Oubeidillah, G. Tootle, V. Lakshmi and G. Kerr, 2009. A Comparison of SNOTEL and AMSR-E Snow Water Equivalent Datasets in Western U.S. Watersheds. Proceedings of the Third International Workshop on Knowledge Discovery from Sensor Data (SensorKDD-2009), June 28, 2009, Paris, France.

Oubeidillah, A. A. and G. Tootle, 2009. Paleo Pacific Ocean Sea Surface Temperature Variability and Upper Colorado River Basin Streamflow. Proceedings of the ASCE World Water & Environmental Resources Congress 2009, May 17-22, 2009, Kansas City, Missouri.

Stephen, H., G. Tootle, C. Moser and A. A. Oubeidillah, 2009. Weather Modification and Climate Variability Impacts on Streamflow. Proceedings of the American Water Resources Association 2009 Spring Specialty Conference, May 4-6, 2009. Anchorage, Alaska.

15. Reports

Hadjerioua, B., SC Kao, R.A. McManamay, M.F.K. Pasha, D. Yeasmin, A.A. Oubeidillah, N.M. Samu, K.M. Stewart, M.S. Bevelhimer, S.L. Hetrick, Y. Wei, B.T. Smith, 2013:An assessment of energy potential from new stream-reach development in the United States: Initial Report on Methodology, ORNL/TM-2012/298. Oak Ridge National Laboratory, Oak Ridge, TN

Kao, SC, R.A. McManamay, M.F.K. Pasha, D. Yeasmin, A.A. Oubeidillah, N.M. Samu, K.M. Stewart, M.S. Bevelhimer, S.L. Hetrick, Y. Wei, B. Hadjerioua, B.T. Smith, 2014:New stream-reach development: a comprehensive assessment of hydropower energy potential in the United States, ORNL/TM-2013/514

16. Conference Presentations:

Cosgrove, B., NOAA/NWS, Silver Spring, MD; and D. J. Gochis, E. Clark, Z. Cui, A. Dugger, G. Fall, X. Feng, M. A. Fresch, J. J. Gourley, S. Khan, D. Kitzmiller, H. Lee, Y. Liu, J. McCreight, A. Newman, A. Oubeidillah, L. Pan, C. Pham, F. Salas, K. Sampson, G. Sood, M. B. Smith, A. W. Wood, D. Yates, W. Yu, and Y. Zhang, 2016. Hydrologic Modeling at the National Water Center: Operational Implementation of the WRF-Hydro Model to support National Weather Service Hydrology. American Meteorological Society 96th Annual Meeting, 10-14 January 2016, New Orleans, Louisiana

McCreight, J., NCAR, Boulder, Colorado; and Y. Wu, D. Gochis, A. Raffieei Nasab, A. Dugger, W. Yu, B. Cosgrove, Z. Cui, A. Oubeidillah, and D. Briar, 2016. Real-Time, Continental Scale Streamflow Nudging with WRF-Hydro: A First Benchmark. American Meteorological Society 96th Annual Meeting, 10-14 January 2016, New Orleans, Louisiana

Cosgrove, B., NOAA/NWS, Silver Spring, MD; and D. J. Gochis, E. Clark, Z. Cui, A. Dugger, G. Fall, X. Feng, M. A. Fresch, J. J. Gourley, S. Khan, D. Kitzmiller, H. Lee, Y. Liu, J. McCreight, A. Newman, A. Oubeidillah, L. Pan, C. Pham, F. Salas, K. Sampson, G. Sood, M. B. Smith, A. W. Wood, D. Yates, W. Yu, and Y. Zhang, 2015.WRF-Hydro: Operational Hydrologic

Modeling in Support of the National Water Center. American Geophysical Union Fall Meeting, 14-18 December 2015, San Francisco, California

Zhu, L., J. Gutenson, A. Oubeidillah, A. Ernest, X. Zhang, 2015. Developing a Multi-sector, Multi-basin Drought Decision Support System Incorporating Economic Consequence Assessment. World Environmental and Water Resources Congress, May 17th – 21st 2015, Austin Texas

Ernest, A., L. Zhu, J. Gutenson, A. Oubeidillah, X. Zhang, 2015. Integrating Heuristic Simulation Models with Inferential Logic for Disaster Response and Recovery Decision Support. World Environmental and Water Resources Congress, May 17th – 21st 2015, Austin Texas

Oubeidillah, A. A., J. Gutenson, A. Ernest, 2015. An Evaluation of Model Results at Streamflow Gages across the Mobile-Alabama River System (MARS) using the RAPID routing model. World Environmental and Water Resources Congress, May 17th – 21st 2015, Austin Texas

Zhang, X, J. Gutenson, L. Zhu, A. Oubeidillah, A. Ernest, 2015. Developing a Decision Support System for Flood Response: NIMS/ICS Fundamentals. World Environmental and Water Resources Congress, May 17th – 21st 2015, Austin Texas

Gutenson, J., A. Oubeidillah, P. Hicks, L. Durham, A. Ernest, L. Zhu, X. Zhang, 2015. Using HAZUS-MH and HEC-RAS to Evaluate Real World Flooding Events in the Upper Alabama River Watershed. World Environmental and Water Resources Congress, May 17th – 21st 2015, Austin Texas

Oubeidillah, A. A., J. Gutenson, A. Ernest, X. Zhang, 2014. Evaluation of Runoff and Soil Moisture in the Mobile Alabama River System (MARS). World Environmental and Water Resources Congress 2014, June 1-5, 2014. Portland, Oregon

Oubeidillah, A. A., J. Gutenson, A. Ernest, 2013. An Operational Toolkit for a Water Distribution System Operational Decision Support Tool. American Water Works Association Distribution Systems Symposium, Sept 15-18 2013. Itasca, Illinois

Oubeidillah, A. A., J. Gutenson, A. Ernest, A. Maestre, 2013. Evaluation of Simulated Flow Results at Streamflow Stations Across the Mobile-Alabama River System (MARS) Using the Variable Infiltration Capacity Model. 2013 Alabama Water Resources Conference, Sept 4-6, 2013. Orange Beach, Alabama.

Oubeidillah, A. A., S. Kao, M. Ashfaq, G. Tootle 2012. A Hydrologic Model Calibration Exercise for Regional Climate Change Impact Assessment of the Conterminous U.S. Presentation at American Geophysical Union (AGU) Fall Meeting, December 5-9, 2012, San Francisco, California.

Pelle, A., S. Chapman, S. Anderson, A.A. Oubeidillah, G. Tootle, H. Grissino-Mayer, 2012: Climatic Drivers of Upper Colorado River Basin Dendrochronologic and Hydrologic Datasets. Presentation at American Geophysical Union (AGU) Fall Meeting, December 5-9, 2012, San Francisco, California.

Oubeidillah, A. A., G.A. Tootle, C. Moser, T. Piechota, K. Lamb, 2011. Upper Colorado River and Gread basin streamflow and snowpack forecasting using Pacific oceanic-atmospheric variability. Presentation at American Geophysical Union (AGU) Fall Meeting, December 5-9, 2011, San Francisco, California.

Anderson, S., G.A. Tootle, A.A. Oubeidillah, C. Moser, H. Grissino-Mayer, 2011:Reconstructions of Upper Green River Basin (Wyoming) Snowpack Using Pacific Ocean Climatic Variability. Presentation at American Geophysical Union (AGU) Fall Meeting, December 5-9, 2011, San Francisco, California.

Oubeidillah, A. A., G. Tootle and S. Anderson. Identificaiton of Atlantic Ocean Sea Surface Temperature Drivers of French Streamflow. Presentation at American Geophysical Union (AGU) Fall Meeting, December 12-18, 2010, San Francisco, California.

Oubeidillah, A. A.., G. Tootle, T. Piechota and C. Moser, 2010. 2009-2010 El Niño: Predicted Hydrologic Response in the United States. Proceedings of the ASCE World Water & Environmental Resources Congress 2010, May 16-21, 2010, Providence, Rhode Island.

Oubeidillah, A. A.., G.A. Tootle, T.C. Piechota, W.P. Miller, J.A. Dracup and C. Jerla. The 2009–2010 El Niño: Hydrologic Relief to U.S. Regions? Presentation at American Geophysical Union (AGU) Fall Meeting, December 12-19, 2009, San Francisco, California.

Stephen, H., G. Tootle, C. Moser and A. A. Oubeidillah, 2009. Weather Modification and Climate Variability Impacts on Streamflow. Presentation at American Geophysical Union (AGU) Fall Meeting, December 12-19, 2009, San Francisco, California.

Moser, C., A. A. Oubeidillah, G. Tootle, V. Lakshmi and G. Kerr, 2009. A Comparison of SNOTEL and AMSR-E Snow Water Equivalent Datasets in Western U.S. Watersheds. Presentation at the Third International Workshop on Knowledge Discovery from Sensor Data (SensorKDD-2009), June 28, 2009, Paris, France.

Oubeidillah, A. A. and G. Tootle, 2009. Paleo Pacific Ocean Sea Surface Temperature Variability and Upper Colorado River Basin Streamflow. Presentation at ASCE World Water & Environmental Resources Congress 2009, May 17-22, 2009, Kansas City, Missouri.

Stephen, H., G. Tootle, C. Moser and A. A. Oubeidillah, 2009. Weather Modification and Climate Variability Impacts on Streamflow. Presentation at American Water Resources Association 2009 Spring Specialty Conference, May 4-6, 2009. Anchorage, Alaska.

Soukup, T., A. A. Oubeidillah, C. Moser and G. Tootle, 2008. Incorporating Climate into a Long Lead-Time Non-parametric Streamflow Forecast. Presentation at American Geophysical Union (AGU) Fall Meeting, December 13-18, 2008, San Francisco, California.

Oubeidillah, A. A. and G. Tootle, 2008. Pacific Ocean Sea Surface Temperature Variability and Western U.S. Snowpack. Presentation at CUASHI Annual Meeting, Boulder, CO.

17. Courses Taught:

University of Texas, Rio Grande Valley

- CIVE 4315: Applied Hydrology
- CIVE 4335: Water Resources Engineering
- CIVE 4392: Senior Design Project (stormwater management)
- CIVE 6342: Hydrologic Modeling
- CIVE 6399: Water Resources Sustainability

University of Alabama:

- CE671: Hydrologic Modeling

University of Tennessee:

- ENV 508: Environmental Engineering Seminar
- ENVE 532: Statistical Methods in Water Resources
- ENV 595: Special Topic: Climate and Hydrologic Modeling
- ENV 595: Special Topic: Stochastic Hydrology
- CE 416: Hydrology