resume\_124@gmail.com  
484 645 6688

Waterbury VT - Email me on Indeed: indeed.com/r//b90bec097e6169fc  
Willing to relocate: Anywhere  
Authorized to work in the US for any employer  
WORK EXPERIENCE  
Science Teacher  
Harwood Union High School - Duxbury VT - 2001 to April 2016 Teach four courses per year.  
2001 to Present - Science Teacher - Harwood Union High School Duxbury Vermont  
Teaching Biology Environmental Science and Earth/Space Science classes at Honors Regular and Topics levels. 2002-16 - Special project was to raise and observe Atlantic Salmon in the classroom as part of the U.S. Fish and Wildlife Service/U.S. Forest Service Adopt-A-Salmon/Salmon-In-The Schools program. Atlantic Salmon were released in an appropriate stream segment so they have a chance of becoming part of a naturally reproducing population. 2012-16 participation with Vermont EPSCoR Research on Adaptation to Climate Change (RACC) program. Role was to involve students in data collection using data loggers (which continuously monitored stream flow and temperature of local streams) and more traditional water quality measurements and have students explore their own research inquiry. 2016 RACC project won Honorable Mention in Governor of Vermonts awards for Environmental Excellence. 2012-13 assist in our schools participation in the Vermont Energy Education Project Whole School Energy Challenge. 2011-13 participated with University of Vermont (UVM) Community-University Partnerships and Service Learning Program by having UVM students teach selected laboratory periods in my classroom for their service learning projects. 2013 Winner of American Chestnut Foundation Learning Box in response to contest to develop a lesson plan for the Learning Box. 2012-13 Initiated and facilitated an agreement between the American Chestnut Foundation and Harwood to plant five highly blight resistant America Chestnut trees in the Harwood forest and become research site for the American Chestnut Foundation. Environmental Science class carried out the planting of the American Chestnut trees. 2008-2009 Participant in National Science Foundation/ University of Michigan/Northwestern University study on comparing professional development techniques for classroom teachers. Summer 2006 Selected for and completed course Biology in Genomic Age Howard Hughes Medical Institute Summer Teachers Workshop at Amherst College. 2002-3 A special project completed in affiliation with the Vermont Institute of Natural Science Community Mapping Program got students to learn about and utilize Global Positioning Systems (GPS) and Geographic Information System (GIS)technology. Computer grade book used during entire period of employment. Test generating software utilized from 2002-16. Test grading software utilized 2009-16. Involved in selecting purchasing maintaining and operating laboratory equipment. Served on faculty committee which recommended and facilitated adoption of Powerschool (online grade book and data management). Served as a peer teacher trainer for adoption of Powerschool. Informal involvement with our schools conversion from oil to wood chip heating. Modeling Dynamic Systems using STELLA course developed approved by school board for one year but not taught. Small grant proposals written and received for the following: Aquarium chiller aquarium to raise Atlantic Salmon in the classroom data logger and phase-contrast microscope. Taught East Coast Swing Dance 2015-16. 2010-2016 Assistant Golf Coach boys and girls teams.  
Operations and Management Section  
Vermont Wastewater Management Division - 1997 to 2001  
   
Oversight of the operations and management of municipal industrial and private wastewater treatment and pretreatment  
facilities collections systems and pump stations. Included carrying out inspections  
monitoring data submittals review of twenty year facility engineering evaluations  
assessments of proposed Operations and Maintenance Manuals engineering design review of proposed facility upgrades technical assistance for wastewater operators follow-up to  
resolve plant operations/design/water quality problems commenting on compliance with environmental health and safety regulations and investigating complaints. Received further  
training in wet weather operations; environmental health and safety issues at wastewater  
facilities; and identification and use of microorganisms as indicators of the status of biological  
treatment processes. Confined space training. On my own time participated in meetings  
related to a federal grant to the Vermont Department of Public Service and the Vermont  
Department of Agriculture to promote anaerobic digestion technology on Vermont dairy farms for manure treatment energy recovery and water quality improvement.  
Residuals Management Section  
Vermont Wastewater Management Division - 1993 to 1997  
Responsibilities included administrative and technical review of sludge management projects (land application heat drying composting  
lime stabilization biological digestion etc.) writing certifications coordinating public  
involvement process. Also involved in design review of new projects/renovations for compliance with pathogen reduction and vector attraction reduction requirements; compliance  
monitoring; responding to and resolving citizen complaints; enforcement of permit conditions; and responding to technical and administrative questions of the permittees and citizens.  
Prepared Notes on Pathogens and Land Application of Sewage Sludge and Domestic Septage. Participant in Sludge/Septage Advisory Group and Pathogens Subcommittee of the  
Sludge /Septage Advisory Group. Quality Assurance Coordinator and Field Sampling Coordinator for dioxin in sewage sludge sampling project. Wrote Data Validation Report to federal Environmental Protection Agency for dioxin in sewage sludge sampling project.  
Assistant Professor  
Norwich University - Northfield VT - 1992 to 1993 Teaching and research in environmental engineering.  
1992-1993 - Assistant Professor - Norwich University - Northfield Vermont.  
Teaching undergraduate courses in the Department of Environmental Engineering Technology. Courses taught include Fluid Mechanics (including laboratory) Water Chemistry/Physical- Chemical Treatment Senior Project (Proposal To Establish A Recycling Program For the Dormitories At Norwich University) Senior Seminar Water and Wastewater Treatment Applied Hydrogeology Water Analysis Laboratory Introductory Biology Laboratory.  
Participant in National Science Foundation three week seminar on developing teaching materials for learning about Constructed Wetlands For Water Quality Improvement.  
Note: position ended due to a faculty reduction-in-force. One-quarter of the faculty full-time equivalent positions were eliminated at the University. The Department of Environmental Engineering Technology and my position were eliminated.  
Assistant Professor  
University of Nebraska-Lincoln - Omaha NE - 1990 to 1992  
- Omaha Nebraska. Teaching and research in environmental engineering.  
1990-1992 - Assistant Professor - University of Nebraska-Lincoln (Omaha Campus) - Omaha Nebraska.  
Teaching undergraduate and graduate courses in the Department of Civil Engineering and developing externally funded research projects. Courses taught included Biological  
Wastewater Treatment (including laboratory) Fluid Mechanics Graduate Seminar Hydraulics  
Laboratory Principles of Environmental Engineering Advanced Biological Processes  
Engineering and Applications of Chemistry to Environmental Engineering (including laboratory).  
Wrote proposal received $40000 grant was principal investigator and supervised graduate  
student for a two year research project on the feasibility of utilizing constructed wetlands for removal of nitrate from groundwater. Major advisor for two full-time M.S. students. Wrote  
internal proposals and received approximately $50000 for purchase of teaching and research  
laboratory equipment. Responsible for purchase of laboratory equipment laboratory  
equipment set-up and laboratory equipment maintenance. Equipment purchased included gas chromatograph muffle furnace phase-contrast microscope walk-in environmental chamber  
dissolved oxygen meter and probe refrigerator and an autoclave.  
Jeff Robins Ph.D P.E. Resume  
Theses Supervised  
 Improving Oxygen Demand Removal At A Secondary Wastewater (Trickling Filter) Treatment Plant. M.S. Okan Nalbant August 1992  
 The Feasibility of Utilizing Constructed Wetlands For Removal Of Nitrate From Groundwater. M.S. Jennifer Rock August 1993.  
Project Manager  
Hoyle Tanner and Associates - 1990 to 1990  
Responsible for project management and engineering analyses for an evaluation of six potential landfill sites and selection of a finalist site to serve 75000  
people in 34 towns for 40 years for the Central Vermont Solid Waste Management District.  
Developed proposal including scope of work for the entire project; involved in sub-consultant  
selection; determined work allocation and time deadlines for sub consultants (geologists  
geotechnical engineers naturalists transportation engineers and landscape architect) and company staff; wrote all contracts; prepared and managed budget; conducted engineering  
analyses related to landfill capacity permitability cost leachate concerns incremental air  
pollution costs from locating landfill distant from center of waste generation; developed  
overall scoring system and prepared figures. Wrote HTA progress report with exception of sub consultant reports in the appendices and presented report at a public meeting. Wrote  
HTA final report with exception of overall cost analysis and sub consultant reports in appendices.  
Environmental Engineer  
Hoyle Tanner and Associates - 1988 to 1990  
Reviewed existing process performance and participated in the development of the upgraded  
design for the Burlington Vermont 5.3 million gallons per day wastewater treatment plant.  
Responsible for sizing designing and writing specifications for upgraded aeration basins to include flexibility for biological phosphorous removal flexibility to receive underflow from  
vortex separator treated stormwater new diffused aeration system anhydrous hydrogen  
chloride gas cleaning system for cleaning air diffusers new blowers and new gates; and for alum alkalinity and sodium hypochlorite chemical feed systems. Wrote proposals for new  
work.  
Environmental Engineer/Solid Waste  
State of Vermont Agency of Natural Resources - Waterbury VT - 1987 to 1988  
Waterbury Vermont. Assessed technical matters related to all aspects of solid waste problems.  
1987-88 - Environm ental Engineer/Solid W aste  
State of Vermont Agency of Natural Resources Division of Solid Waste - Waterbury Vermont.  
Engineer in the Technical Assistance Section. Reviewed designs for improvements to landfills  
leachate treatment and recycling facilities. Monitored landfill operations and related water  
quality problems. Some involvement with waste reduction and recycling. Responsible for addressing public comments on new regulations. Reviewed landfill siting efforts of Central  
Vermont Solid Waste Management District. Participated in landfill compaction studies and Jeff Robins Ph.D P.E. Resume  
monitoring well sampling. Conducted enforcement actions related to landfill operations and illegal dumping.  
Teaching Assistant  
Department of Civil Engineering - Amherst MA - 1986 to 1987  
Department of Microbiology University of Massachusetts at Amherst - Amherst Massachusetts. Prepared laboratory materials laboratory lectures and quizzes; coordinated preparations with Microbiology Prep room; assisted and answered questions for students; revised laboratory manual; and graded papers for graduate level Microbial Diversity course.  
Graduate Research Assistant  
Department of Civil Engineering - Amherst MA - 1984 to 1987  
Developed experimental proposal. Designed supervised and participated in construction of experimental equipment. Operated a laboratory scale anaerobic wastewater  
treatment reactor (chemostat) for 640 consecutive days. Performed biological and chemical  
laboratory analyses. Operated phase fluorescence and scanning electron microscopes.  
Printed photographs. Purchased equipment and supplies. Conducted formal statistical analysis. Lab safety coordinator.  
Teaching Associate  
Department of Civil Engineering - Amherst MA - 1983 to 1984  
Prepared laboratory lectures problem sets solution sets lab demonstrations paper assignment and lab grades for the Basic Environmental Engineering course.  
Engineer Intern  
State of Connecticut Department of Health Services - Hartford CT - 1981 to 1983  
Water Supplies  
Section - Hartford Connecticut. All aspects of regulating public water supplies including design review and resolving water quality problems.  
1981-83 - Engineer Intern  
State of Connecticut Department of Health Services Water Supplies Section - Hartford  
Connecticut. Reviewed designs for wells treatment storage and pumping facilities. Responded to and resolved water quality complaints for water supply systems. Participated in water  
quality and quantity planning activities. Monitored water quality data for public water supply  
systems. Author of 1983 Report to the Connecticut Legislature of Organic Chemicals In  
Drinking Water. Participated in design standards review committee.  
Apprentice Farmer  
Northeast Organic Farming Association - Cornish NH - 1979 to 1980  
Sharon Vermont. Assisted a family in setting up their new farm in 1979. 1980 spent on a different farm participating in operations of a working farm.  
1979-80 - Apprentice Farmer  
Northeast Organic Farmers Association Apprenticeship Program - Cornish New Hampshire;  
Sharon Vermont. Assisted a family in setting up their new farm in 1979. 1980 spent on a  
different farm participating in operations of a working farm. Responsibilities included animal and market garden care maple sugaring green-house cultivation of seedlings chemical soil  
testing construction carpentry cooking and helping in beekeeping pruning and land clearing  
activities.  
Environmental Scientist  
Association of New Jersey Environmental Commissions - Mendham NJ - 1978 to 1979  
Mendham New Jersey. Working with all levels of government on water quality toxic substances and land-use problems.  
Jeff Robins Ph.D P.E. Resume  
1978-79 - Environm ental Scientist  
Association of New Jersey Environmental Commissions - Mendham New Jersey/Upper Raritan Watershed Association. Served as technical assistant to the Morris County Toxic Substances Task Force as part of the federal EPA Toxic Substances Public Participation Pilot Program for New Jersey. In a separate capacity helped local environmental commissions with subdivision review pollution monitoring educational activities and establishing water quality testing programs. Served in a watchdog capacity monitoring water polluters. Performed physical chemical and biological water quality tests and analyzed data.  
Jeff Robins Ph.D P.E. Resume  
Nature Director  
Camp High Sierra - Sonora CA - 1977 to 1977  
Taught nature merit badges  
supervised two staff purchased supplies and developed program activities at Boy Scout summer camp of 100 to 200 scouts.  
Sum m er 1977 - Nature Director  
Boy Scouts of America Camp High Sierra - Sonora California. Responsible for developing  
resources and day to day operation of the Nature Program for a camp of 100 to 250 scouts  
supervising two assistants teaching nature related merit badges and planning and participating in other campwide events.  
Taxonomic Botanist and Plant Comunity Ecologist  
Jeff Robins - Lee Vining CA - 1976 to 1977  
One of twelve undergraduates on a  
National Science Foundation grant who researched the ecological effects of water diversions by Los Angeles at and around Mono Lake. One of three authors of the botanical chapter:  
principal author of the plant list for the study area in An Ecological Study of Mono Lake  
California (approximately 200 plant specimens from the voucher collection were accepted into the permanent collection of the Dudley Herbarium at the California Academy of Sciences in  
Research Assistant  
Dr. Paul Ehrlich's - Stanford CA - March 1976 to May 1976  
Carried out an experiment on the non- use of an available larval food plant.  
EDUCATION  
PhD in Civil (Environmental) Engineering  
University of Massachusetts at Amherst - Amherst MA 1983 to 1988  
MS in Civil (Environmental Engineering and Science) Engineering  
Stanford University - Stanford CA 1980 to 1981  
BA in Human Biology (concentrations in botany ecology and water studies)  
Stanford University - Stanford CA 1974 to 1978  
SKILLS  
Microsoft Office (10+ years)  
CERTIFICATIONS/LICENSES  
Professional Engineer  
July 2018  
Certified 7-12 Math and Science teacher  
2021  
Professional Engineer  
July 2018