

## **Dr. Dejenie A. Lakew, Ph.D. (Curriculum Vitae)**

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Full Time Faculty

Stratford University

School of Arts and Sciences

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**Summary:** I am an accomplished and inspiring, passionate professor of mathematics who strives to make students perform at their fullest potentials in learning mathematics and be successful.

### **Education**

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- **Ph.D.**, Mathematics, University of Arkansas, Fayetteville
  - **M.Sc.**, Mathematics, Addis Ababa University, Ethiopia
  - **B.Sc.**, Mathematics, Addis Ababa University, Ethiopia
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### **Research Interests**

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- Clifford analysis, functional analysis and operator theory, PDEs

### **Teaching Experience and Students' Project Advising**

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#### **Stratford University (Full time faculty) July 2017 – present**

- Modern Mathematics with Algebra, College algebra, Fundamentals of mathematics

#### **Bryant & Stratton College (Adjunct); Virginia College (adjunct), 2016-present**

- Business Statistics, Advisor for Students' Projects ; college algebra

#### **John Tyler Community College (adjunct faculty) 2011- 2016**

- Developmental mathematics, college algebra, pre-calculus, calculus, statistics
- Advisor for Students' Projects in Statistics

### **Virginia Union University (Associate professor) 2008-2010**

- College algebra, calculus, college trigonometry, discrete mathematics, calculus for business I, differential equations, introduction to statistics, advising independent study, mathematics for business
- Advisor for Students' Individual Projects

### **Virginia State University (Assistant professor) 2006-2008**

- Basic mathematics, calculus I, college algebra, trigonometry, finite mathematics

### **University of Arkansas at Pine Bluff (Assistant professor) 2000-2006**

- College algebra, abstract/modern algebra, trigonometry, discrete mathematics, calculus, differential equations and mathematical modeling, linear algebra

### **Addis Ababa University (Lecturer) 1989-1994**

- Elementary calculus, calculus, linear algebra, abstract algebra, complex variables, introduction to real analysis/graduate course

### **Asmara University (Assistant lecture & lecturer) 1984-1988**

- College algebra, calculus, abstract algebra, linear algebra

### **Leadership Skill**

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- Interim chair of the department of mathematics, Virginia Union University
- Chairperson to both faculty search and curriculum committees of the department

### **Awards & Recognitions**

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- Graduate teaching assistant position – University of Arkansas
- Summer doctoral fellowship – University of Arkansas
- Marquis Who's Who

### **Selected Publications**

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- On orthogonal decomposition of a Sobolev space, **Adv. Oper. Theory**, Vol. 2, No. 4 (2017) 419-427, **arXiv**: 1611.04249.v1, Nov. 14, 2016;
- New proofs of properties of orthogonal decomposition of a Hilbert space, **arXiv**: 1510.07944v1, Oct. 27, 2015
- On orthogonal decomposition of a Hilbert space  $\mathcal{L}^2(\Omega)$ , **Int. J. of Math. Comp. Sci.**, Vol. 10, No. 1 (2015) 27-37; **arXiv**:1503.01209v1, 2015,

- Clifford analysis on Orlicz-Sobolev spaces, **arXiv** : 1409 : 8380v1, 2014 (with Mulugeta Alemayehu)
- Norm estimates for solutions of elliptic BVPs of the Dirac operator, **arXiv** : 1401 : 3904v1, 2014
- The Fibonacci sequence via the  $\Sigma$  - transform, **arXiv** : 1401 : 0243v1, 2014
- The intrinsic  $\pi$  - operator on domain manifolds in  $\mathbb{C}^{(n+1)}$ , **Comp. Anal. Oper. Theory**, Vol. 4, No. 2 (2010) 271-280 (with John Ryan).
- The spherical  $\pi$  operator, **arXiv**: 0811: 3257v1, 20 Nov 2008.
- $W_{\{Cl_{\{n\}}\}^{2,k}}$ -best approximation of a  $\gamma$  - regular function, **J. Appl. Anal.**, Vol. 13, No. 2 (2007) 259-273.
- Complete function systems and decomposition results arising in Clifford analysis, **Comp. Meth. Function Theory**, CMFT, No1 (2002) 215-228 (with John Ryan).
- Complete function systems and decomposition results arising in Clifford analysis, **Progress in Analysis: Proceedings of 3<sup>rd</sup> International ISSAC congress Vol. 1** (2001) 325-336 (with John Ryan).
- Clifford analytic complete function systems for unbounded domains, **Math. Meth. Appl. Sci.**, Vol. 25(2002) 1527 - 1539 (with John Ryan).
- Over determined problems for elliptic equations, **Proceedings of the 4th Int. Coll. on Differential Equations**, VSP, Inter. Sci. Pub., The Netherlands, 1994: 11 – 20 (with Giovanni Porru).

### Selected Presentations

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- 2018 Joint Mathematics Meeting, San Diego, CA, Jan 10 -13, *On Orthogonal Decomposition of a Sobolev Space.*
- Virginia Commonwealth University, department of mathematics & applied mathematics, analysis, logic and physics seminar, Oct. 16, 2015: "*On orthogonal decomposition of a Hilbert space*"
- 1022nd American Mathematical Society Special Session on "*Dirac operators in analysis and geometry*", Nov. 3 - 4; 2006; University of Arkansas, Fayetteville: "*The intrinsic  $\pi$  - operator on domain manifolds*"
- Departmental colloquium presentation at VSU, Oct. 2006: "*Finite  $Cl_{\{n\}}$  - minimal functions to approximate a  $\gamma$ - regular function*".
- American Mathematical Society, Joint Mathematics Meeting, Jan. 7 - 10; 2004, Phoenix Arizona: "*Best approximation of a  $\gamma$  - monogenic function over certain Sobolev spaces*"
- 63rd annual meeting of the Mathematical Association of America (MAA), Oklahoma-Arkansas Section, March 30 - 31; 2001: " *$\mathcal{L}^{\{p\}}$  - approximations*"
- 62nd Annual Meeting of the MAA of Oklahoma-Arkansas Section, March 31-April 1; 2000: "*Elliptic BVPs and  $Cl_{\{n\}}$  - complete function systems*"
- Departmental Seminar on my doctoral thesis at the University of Arkansas-Fayetteville: "*First and higher order BVPs and Clifford analytic complete function systems in the Bergman spaces  $B^{\{p\}}(\Omega, Cl_{\{n\}})$  and  $B^{\{p, l\}}(\Omega, Cl_{\{n\}})$* "
- 61st Annual Meeting of the MAA of Oklahoma-Arkansas Section, March 26 - 27; 1999: " *$Cl_{\{n\}}$  - complete function systems over unbounded Lipschitz domains in  $\mathbb{R}^n$* "