

## CURRICULUM VITAE

### PERSONAL DATA

---

NAME: Dereje Kifle Boku  
ADDRESS: Dilla university, 419, Dilla, Ethiopia  
PHONE: +251983646400 (or +4915214395301)  
EMAIL: [dkifle16@yahoo.com](mailto:dkifle16@yahoo.com)

### EDUCATION

---

AUGUST 5, 2016 PhD in MATHEMATICS, TU Kaiserslautern, Germany  
Thesis: "Gröbner bases over extension fields of the field of rational numbers"  
Research area : **Computer Algebra and Algebraic Geometry**

JANUARY 2011 Master of Science in MATHEMATICS, Addis Ababa University, Ethiopia  
Project: "Feed Forward Neural Networks"  
GPA: 3.78/4

JULY 2008 Undergraduate Degree in MATHEMATICS, Haramaya University, Ethiopia  
Major Mathematics and Minor Physics  
GPA: 3.81/4 and MAJOR GPA : 3.95/4

### TEACHING EXPERIENCE (MATHEMATICS)

---

|                           |   |
|---------------------------|---|
| JULY 2019 - PRESENT       | Post doctoral Researcher at University of Kaiserslautern, Germany   |
| SEPT 2016 - JUNE 30, 2019 | Assistant Professor of Mathematics at Dilla University, Dilla, SNNP, Ethiopia                             |
| JAN 2011 - AUG 2012       | Lecturer at Samara University, Samara, Afar, Ethiopia   |
| JAN - AUG 2009            | Assistant Lecturer at Samara University, Samara, Afar, Ethiopia   |
| AUG - DEC 2008            | High School Teacher at Chelelekitu high school, SNNPR, Gedeeo Zone, Kochore Wereda, Chelelekitu, Ethiopia |

### SCHOLARSHIPS

---

JULY 1, 2019 - JUNE 30, 2020 Scholarship for a research assistant from the University of Kaiserslautern(Germany) Department of Mathematics together with SFB-TRR 195 <https://www.computeralgebra.de/sfb/>

JULY - SEPT 2018 Scholarship for a research visit from the University of Kaiserslautern(Germany) Department of Mathematics together with SFB-TRR 195 <https://www.computeralgebra.de/sfb/>

JULY - SEPT 2017 Scholarship for a research visit from the University of Kaiserslautern(Germany) Department of Mathematics

JAN - AUG 2016 Scholarship for PhD studies from the University of Kaiserslautern(Germany) Department of Mathematics

OCT 2012 - DEC 2015 DAAD Scholarship for PhD studies at University of Kaiserslautern, Germany

### RESEARCH AND PUBLICATIONS

---

- **Published:**

- D. K. Boku, W. Decker, C. Fieker, and A. Steenpass. Gröbner bases over algebraic number fields. In *Proceedings of the 2015 International Workshop on Parallel Symbolic Computation, PASCO'15*, New York, NY, USA, 2015. ACM.

- D. K. Boku: An Efficient Algorithm for Computing Syzygies over algebraic number fields. In *Proceedings of the 2017 National Workshop on Mathematics for the advancement of science and technology*, Adama, Ethiopia, 2017.
- **Singular Libraries:**
  - D. K. Boku, W. Decker, and C. Fieker. `nfmodstd.lib` A SINGULAR 4-0-2 library for computing Gröbner bases of ideals in polynomial rings over algebraic number fields, 2015.
  - D. K. Boku, W. Decker, and C. Fieker. `ffmodstd.lib` A SINGULAR 4-0-3 library for computing Gröbner bases of ideals in polynomial rings over algebraic function fields, 2016. <https://github.com/dkboku/Sources/tree/ffmodstd>
  - D. K. Boku, W. Decker, and C. Fieker. `nfmodsyz.lib` A SINGULAR 4-0-3 library for computing syzygy modules over algebraic number fields, 2016. <https://github.com/dkboku/Sources/tree/nfmodsyz>
- **Julia Libraries:**
  - A Julia library on modular univariate rational interpolation and Berlekamp-Massey Algorithm Sept 2018.

## COMPUTER SKILLS

---

|                                 |  |
|---------------------------------|--|
| Operating system                | Linux, Windows   |
| Programming Languages           | SINGULAR, JULIA, C, Python<br><a href="http://www.singular.uni-kl.de">www.singular.uni-kl.de</a> |
| Typesetting and Word processing | Latex, Word  |
| Office Programs                 | Excel, PowerPoint  |

## CONFERENCES

---

|               |  |
|---------------|--|
| OCT 6-13 2017 | Contributed talk: AIMS-Volkswagen Stiftung Workshop on Introduction to Computer Algebra and Applications Douala, Cameroon  |
| APRIL 2017    | Presented a paper: National Conference on Mathematics for the advancement of science and technology April 28-29, 2017, Adama, Ethiopia   |
| AUG 2015      | SIAM Conference on Applied Algebraic Geometry (AG15) Aug 3-7, 2015, Daejeon, South Korea   |
| SEPT 2013     | S2AM: Summer School in Algorithmic Mathematics, 2-6 Sept 2013, at Universität Hamburg, Germany.<br><a href="http://www.computeralgebra.de/s2am-2013">http://www.computeralgebra.de/s2am-2013</a> |
| JUNE 2012     | International Conference on Complex Analysis and Partial Differential Equations, in June 2012 held at Addis Ababa University.  |

## ADMINISTRATIVE OFFICE TASK

---

|                       |   |
|-----------------------|---|
| SEPT 2018-JUNE 2019   | Director of College of engineering and Technology, Dilla University   |
| NOV 2017- AUGUST 2018 | Academic Vice Director under college of engineering and Technology, Dilla University                                  |
| MARCH - OCT 2017      | Coordinator for short term training's under the Community service and Engagement directorate office, Dilla University |

## LANGUAGES

---

|         |                 |
|---------|-----------------|
| ENGLISH | Proficient      |
| GERMAN  | good (level B1) |
| GEDEO   | Mother tongue   |
| AMHARIC | Bilingual       |
| OROMO   | good            |

## SOME PERSONAL SKILLS/ABILITIES

---

- Ability to work effectively in a team
- Good communication skills and interpersonal relationship
- Ability to work under pressure
- Ability to work with no supervision
- Quick to learn new ideas and concepts

## INTERESTS AND HOBBIES

---

- Technology, Programming, Soccer, Table Tennis
- Listening to soft songs, cooking, and Travelling