

Henok Shiferaw

✉ henok@hshiferaw.com

EDUCATION

NC A&T STATE UNIVERSITY




MS in Computational Science and Engineering

December 2011 | Greensboro, NC
College of Engineering

BS in Manufacturing System/Eng.

May 2009 | Greensboro, NC
School of Technology
Honors - Magna Cum Laude
Dean's List (All Semesters)

LINKS

 github.com/hshiferaw
 [linkedin.com/hshiferaw](https://www.linkedin.com/company/hshiferaw)
 <https://hshiferaw.com>

SKILL HIGHLIGHTS

Excellent communication
Effective research and analysis
Self-motivated
Cross-Cultural Experience
Modelling and Simulation
Scientific Computing
Relational Database
Qualitative and Quantitative Analysis
Technical Writing

COURSEWORK

GRADUATE

Advanced Numerical Method
Data Struct Software Prin&Prog
Data visualization
Multi-Scale&Multi-Physics Modeling
Scientific Database
Advanced Scientific Visualization
Analysis & Design of Supply Chain System

UNDERGRADUATE

Micro-Computer Applications
Programmable Logic Controller (PLC)
Composite Matr'l Fabrications
Statistical Process/Qual Ctrl
(Research Asst. & Teaching Asst)
Power Technology - Honors

EXPERIENCE

UNITED STATES PATENT & TRADEMARK OFFICE

Primary Patent Examiner - Electrical and Software Engineering

April 2017 – Present | Alexandria, VA

- Successfully managed large case docket, while consistently exceeding productivity requirements.
- Collaborated with supervisors and colleagues to interpret and apply appropriate legal statutes.
- Worked independently to evaluate patent applications in the Network Printing, Scanning, Color, Halftone, Image Analysis, Data Compression, Data Analysis, Data Encryption, Barcode Symbology, FAX/PRINTER/SCANNER Technology and Display System arts for compliance with federal patent laws and regulations.
- Worked independently to discuss and negotiate with the applicant and patent attorney to resolve any matters raised in the final report.
- Communicated results of prior art searches with applicants both orally and in writing to facilitate compact prosecution of patent applications.
- Simultaneously organized and prioritized multiple applications to meet both Production and Docket Management goals and deadlines (+110% Production).
- Ability to efficiently digest large volumes of scientific information, in order to make timely decisions regarding patentability of an application.

UNITED STATES PATENT & TRADEMARK OFFICE

Technology Center Quality Assurance Specialist (TQAS) - Detail

November 2021 – March 2021 | Alexandria, VA

- Review work products for compliance with all applicable laws, rules and office policies.
- Determine and analyze quality trends within the Technology Center based on the review of work products.
- Assist with the development and implementation of appropriate training based upon a review and analysis of work products.
- Other quality related duties as assigned.

UNITED STATES PATENT & TRADEMARK OFFICE

Patent Examiner - Electrical and Software Engineering

May 2012 – April 2017 | Alexandria, VA

- Examined applications and intermediated with patent attorneys to grant or deny patents.
- Focus on Network Printing, Scanning, Color, Halftone, Image Analysis, Data Compression, Data Analysis, Data Encryption, Barcode Symbology, FAX/PRINTER/SCANNER Technology and Display System.
- Training in case law, examination, claim interpretation, restrictions, utility, appeals and appeal briefs, double patenting, 35 U.S.C. 102, 103, and 112, and MPEP. Researched invention to determine whether it was novel or already in existence
- Applied aspects of procedural, substantial, case and statutory law to the Patent Examination process.
- Received training in CDMA, TDMA, FDMA, OFDMA, 3G, 4G and LTE technology throughout career.
- Effectively interfaced with internal/external customers daily.

SKILLS

PROGRAMMING

Python • Perl • R • PHP • Matlab/GNU Octave • bash/shell • Mathematica

MARKUP LANGUAGES:

L^AT_EX • R Markdown • HTML • CSS

FAMILIAR:

iOS • Android • JavaScript • PostgreSQL • Apache Cassandra

CLOUD COMPUTING

Microsoft Azure • Amazon Web Services (AWS)

WEB SERVER

Apache • Nginx • NodeJS

RELATIONAL DATABASES

Oracle • SQL Server • MySQL Teradata • Microsoft SQL Server Cassandra

CONTAINERS & OS

Kubernetes • Docker • Windows MacOS • Linux

PRODUCTIVITY SOFTWARE'S

Microsoft Office (Word, Excel, and PowerPoint) • SPSS • Jupyter

OTHERS

COMSOL • ANSYS • AVS/Express OSHA • AutoCAD • Solidworks Parametric Modeling • Blueprint Reading Geometric Tolerance and dimensioning • Supply Chain Enterprise Resource Planning (ERP)

CERTIFICATIONS

Microsoft - AZ Data Fundamentals
Microsoft - Azure Fundamentals
Microsoft - AI Fundamentals
Lean Manufacturing (John Deere)
Six Sigma (Green Belt Certification)

OFFICE OF OUTREACH AND TECHNOLOGY TRANSFER

Licensing Associate - NC A&T SU

Summer 2007 – May 2012 | Greensboro, NC

- Provide patent and marketing research results to the university facility, staff, and students.
- Assess research-funded technologies for their competitive advantage and commercial potential.
- Review patent application for fulfillment with all laws and regulation.
- Professionally communicate with researchers, industry experts and potential licensing companies.

HANDS ON EXPERIENCE WITH MAJOR SOFTWARE

Personal Skill Development

Spring 2010 – Present

- Acquired Oracle, MS-SQL Server, and Teradata SQL basic skills.
- Acquired LAMP Web development experience.
- Run and maintain personal Apache server and personal Website.
- Acquired Data Visualization skills coupled with which applied the courses I took in graduate classes.
- Current member of the Apple Beta Software Program for iOS and MacOS.

RESEARCH PAPER & PUBLICATION

Master Thesis 2012

- Probabilistic analysis of property uncertainties using resin infusion flow modeling and simulations – resin viscosity and preform permeability. [PDF](#)

Publication - Taylor & Francis 2015

- Statistical Analysis of Uncertainties in Deterministic Computational Modeling – Application to Composite Process Resin Infusion Flow Model. [PDF](#)

AWARDS AND ACHIEVEMENTS

USPTO Bronze Medal Award - 2018

Passed USPTO Partial and Full signatory program

Passed USPTO Proficiency Exam

+110 % Production (8+ consecutive Years)

+110 % Docket Management (8+ consecutive Years)

Lean Manufacturing (John Deere)

Six Sigma (Green Belt Certification)

Caterpillar Scholarship Recipient

SOCIETIES

Society of Ethiopian American Engineer & Scientist (USPTO Affinity Group)

Golden Key International Honor Society

Society of Manufacturing Engineer (SME)