

Khaleelulla Khan Nazeer

Curriculum Vitae

Education

2016–2018 Masters in Information and Communication Engineering,

Technische Universität Darmstadt, Darmstadt, Germany.

GPA: 1.78

2009–2013 Bachelor of Engineering in Electronics and Communication,

Visvesvaraya Technological University, Belgaum, India.

GPA: 2.1

Experience

Vocational

Mar 2018 - Master Thesis at TU Darmstadt,

Sep 2018 INTEGRIERTE ELEKTRONISCHE SYSTEME (IES) - TU DARMSTADT.

Project Title: "Design and analysis of a 0.7 to 2.3 GHz adjustable, high spectral purity CMOS oscillator"

o Tools used: MATLAB, Cadence Virtuoso

Jun 2017 - Studentische Hilfskraft - Embedded Systems (Hardware),

May 2018 G.I.N. GMBH, Darmstadt.

- Build and test embedded hardware prototypes.
- Performing tests on newly developed circuits.
- Developing new production test environment on python.

Dec 2016 - Student Research Assistant.

 $\mbox{Mar 2017} \ \ \mbox{Signal Processing Group (SPG)} - \mbox{TU Darmstadt}.$

Project Title: "Implementing Machine Learning Algorithms And Statistical Features For Sports Analytics"

- o Programming language used: Python
- Extract Features from real world data recorded from 3D accelerometer, 3D gyroscope and attitude (orientation) measurements
- o Apply Feature selection and Machine learning algorithms to the extracted features
- Train Supervised Machine learning model using recorded data
- Predict the Sport score and compare with human scorer

May 2014 - Post Silicon Validation Engineer,

Sep 2016 TESSOLVE SEMICONDUCTORS PRIVATE LIMITED, Bangalore (India).

Worked as a contractor for Texas Instruments, India

- Specialize in Bench Characterization / Evaluation
- Test and Characterization of High speed analog devices (ADC)
- o Characterize device performance and prepare characterization report
- Write and debug test programs for device characterization
- Analyze test data to understand the cause of device failures, and define solutions. Identify and resolve device performance issues promptly
- Generating Data sheet Specifications and Plots
- o Development of test environment for each device
 - Understand device specifications and plan tests
 - Design circuit necessary for bring up of test device
 - Test fresh PCBs and plan modifications if necessary
- o Co-ordinate with ATE Engineers to ensure valid test and characterization
- o Develop new techniques to streamline characterization process

Miscellaneous

Apr 2017 - Advanced Integrated Circuit Design Lab,

July 2017 Integrated Electronic Systems – TU Darmstadt.

Achieved score of 1.0

- Design a 3-bit DAC using MOSFET 90nm technology
- Implement the circuit and simulate in Cadence Virtuoso
- Design layout for the circuit.
- o Gain knowledge of Analog and Mixed signal design flow.

Aug 2017 Hardware Description language (HDL) Lab,

Integrated Electronic Systems – TU Darmstadt.

Achieved score of 1.7

- Use Verilog to model a 5 stage pipelined processor that is defined on ARM Thumb instruction set level.
- Go through the digital design process encompassing specification, register-transfer-level modeling, simulation/verification, synthesis and gate-level simulation.
- Evaluate the system's performance and resolve bottlenecks.
- o Practice group work, documentation and presentation techniques.
- Apply course knowledge and use industry-grade tools, particularly: Modelsim (Mentor Graphics) and Design Compiler (Synopsys)

	Programming skills		Tools
	***	Cadence Virtuoso	****
C / Embedded C	****		***
		_	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
Verilog	★★★☆☆	Git	★★★★ ☆
		Eclipse CDT	***
		MATLAB	***
		LabView	****
	Hardware skills		Languages
Soldering	***	English	****
Lab equipment	****	German	****