# Curriculum Vitae Mehmet Can

## **Summary**

Electrical engineer and university lecturer with over 8+ years of experience in analog electronics and control systems, physics, and mathematics.

- Driven to find the connection between theory and practice
- Analytic mind-set and approach
- Organized
- Flexible
- Collegially

#### **Personal details**

Name : Mehmet Surname : Can Gender : Male

Address : Hoek van het IJ 3
Postal code, city : 8223 BH, Lelystad
City of birth : Istanbul (Turkey)
Date of birth : August 9, 1983
Nationalities : Turkish and Dutch

Telephone number : 0031616179479 (0616179479 directly from The Netherlands)

E-mail : <u>can.mehmet.tr@gmail.com</u>

Driver's license : B

#### **Education**

Master Microelectronics, University of Technology Delft (Master of Science diploma)
Pre-Master Microelectronics, University of Technology Delft
Bachelor Electrical Engineering, Hogeschool van Amsterdam (Bachelor diploma)
Cum Laude Propedeuse Bachelor Electrical Engineering, Hogeschool van Amsterdam
HAVO, ISG Arcus, Lelystad, The Netherlands
MAVO, Norbertus MAVO, Tilburg, The Netherlands
Primary Education, Het Driespan, Enkhuizen, The Netherlands
Primary Education, Binbaşı Necatibey İlköğretim Okulu, Istanbul, Turkey

#### **Courses**

## 2015 Analog Electronics Design, Anton Montagne, High Tech Institute

Aspects of the course:

- Analysis and design of an amplifier using nullor model.
- Translating the specifications like bandwidth, noise, and power into boundary conditions, and identifying the show stoppers and fundamental limits.
- Presentation of the results using SLiCAP and MATLAB.

## 2015-2016 Foundation Course Didactic Competence (FCDC). Certificate achieved.

#### Modules:

- Development Education Program; designing curriculum
- Conduction Education and Lecturing
- Professional Lecturer and Coaching
- Examination and Grading



#### Working experience

Period : August 2013 to present

Function : Lecturer Bachelor Electrical Engineering

Organization : De Haagse Hogeschool in Delft

Responsibilities:

- Providing theoretical and practical lessons for the courses in electronics, control systems, and mathematics.
- Assist students in school projects, internship, and graduation projects.
- Developing and organization of the core analog electronics and control systems program for electrical engineering department.
- Designed course materials, including syllabus, writing assignments and exams.

 Utilized innovative methods of instruction, including video lectures, interactive class activities and discussions to present course material.

Period : October 2011 to October 2012

**Function**: Electrical Engineer

**Organization**: MAPPER Lithography in Delft

Responsibilities:

- Design of an electron beam current measurement system for the control of the electron dose for pattern writing on a wafer.
- Analyzing the situation and identify what parts are needed for this measurement.
- Investigate which type of sensor, amplifier, cabling, and DAQ card is best applicable for this measurement.
- Mapping electrical and mechanical aspects of the measurement.
- Research and design of electrical circuits, mechanical design of the sensor and wiring for non-magnetic and vacuum-compatible environment in the lithography machine.

Period : October 2010 to July 2011

Function : Lecturer Bachelor Electrical Engineering

Organization : Hogeschool van Amsterdam

Responsibilities:

- Providing theoretical and practical lessons for the courses in electronics, electric circuits, control systems, and mathematics.
- Assist students after their propedeuse of bachelor phase to continue with the Master.
- Developing, organizing, discussing, and reviewing exams and guizzes.
- Developing and organization of the core program for first year electrical engineering students.

Period : September 2005 - present Function : Lecturer and study coach

Organization : Can Bijles

Responsibilities:

- Provide tutoring in the courses electronics, electric circuits, control systems, digital signal processing, calculus, linear algebra, and differential equations for college and university students.
- Provide tutoring in the courses mathematics, physics, and chemistry at Higher General Secondary Education (Dutch: HAVO and VWO) students.
- Assist in making and maintaining a study program.
- Advising on career choices.
- Guidance for students that would like move from Bachelor to Master.
- Instructive courses for smart and efficient learning.
- Assisting people from industry.

Website : http://www.canbijles.nl

#### **Graduation works and internships**

Period : March 2009 to February 2010 Function : Graduate, Master of Science

Organization: NIKHEF (National Institute for Subatomic Physics), Amsterdam.

Responsibilities:

- Characterization of silicon X-ray sensors based on different guard structure ring to reduce the leakage current and to increase collection efficiency.
- Research the effect of cutting using Deep Reactive Ion Etching (DRIE) and the difference between DRIE process and standard blade dicing technique on the leakage current of the X-ray sensors.
- Comparison of X-ray sensors with guard ring with conventional silicon X-ray sensors.

Period : August 2009 to December 2009
Function : Intern. Master of Science

Organization: NXP Semiconductors Nijmegen, Department Quality Analytical Services

Responsibilities:

• Investigation of the effect of the IC package on the ESD (Electro Static Discharge) stress.

- Analyzing the measurement data and the measurement errors in ESD stress measurements.
- Research on the Charged Device Model (CDM) conditions for ESD protections made under CMOS technology.

Period : September 2007 to July 2008 Function : Graduate, Bachelor of Science

Organization : University of Technology Delft, Department Nanoelectronics and Neural Networks

Responsibilities:

- Literature survey on the cause of 1/f noise behavior in a tunnel diode.
- Comparison of the physical structure of the tunnel diode and MOSFET.
- Use of 1/f noise data of a MOSFET for the 1/f noise of a tunnel diode.
- Examination of the 1/f noise models and analyze which model fits the best for the 1/f noise behavior of a tunnel diode.

Period : August 2005 to January 2006 Function : Intern, Bachelor of Science

Organization : Philips Semiconductors Nijmegen, Department Device Engineering and Characterization

Responsibilities:

- Literature survey on the ESD (Electro Static Discharge) behavior.
- Measuring ESD protections under CMOS technology and A-BCD3 technology.
- Performing ESD tests using Human Body Model, Charged Device Model, and ESD-Gun model.
- Comparing the measurement results of different types of ESD and validation the differences and similarities.

# Knowledge

## Languages

Writing Verbal

Dutch : Good/Excellent Good/Excellent

English : Good Good
 Turkish : Excellent Excellent

#### **Electronics and Semiconductor Physics**

- Semiconductor Physics and Devices
- Noise Analysis and Measurements
- Analog Filter Design Using Special Responses (Bessel, Butterworth, Chebyshev, and Cauer)
- Kalman Filtering

# **Control Systems**

- Design of PID and lag-lead controllers analytically and using MATLAB
- State-Space Design
- Analog and Digital Controller Design
- Nonlinear Control Systems Design
- Systems Dynamics using Bond Graphs

## **Mathematics and Modeling**

- Lagrangian and Hamiltonian Mechanics
- Linear and Non-linear Differential Equations
- Complex Function Theory, Fourier and Laplace Transforms

#### **Software**

- MATLAB
- Maple
- SPICE Circuit Simulator
- Windows Office programs: Excel, Word, PowerPoint, and Outlook
- Basic knowledge in C.