YAMAN PARASHER

Erasmus Mundus Master's - Integrated Photonics, Sensors & Networks

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EDUCATION

Erasmus Mundus Joint Master Degre in Photonic Integrated Circuits, Sensors & Networks (PIXNET)

Aston University

Sept 2020 - Present Birmingham, UK

Erasmus Mundus Joint Master Degre in Photonic Integrated Circuits, Sensors & Networks (PIXNET)

TeCIP Institute, Scuola Superiore Sant'Anna

Sept 2019 - Aug 2020 Pisa, Italy

Integrated Bachelor's (Electronics & Communication Engineering) + Master's (Wireless Communication & Networks)

Gautam Buddha University

2013 - 2018 Greater Noida, India

EXPERIENCE

Software Development Intern

TeCIP Institute, Scuola Superiore Sant'Anna

June 2020 – August 2020 Pisa, Italy

- Project : Emergency Vehicle Localization by Telecom Italia (TIM)
- Created a sequence of coordinates to simulate a route and export via JSON format.
- Created a routine to treat JSON with the coordinates and update the position of the cars on the map.
- Calculated the absolute position between ordinary vehicles and the emergency vehicle.

Project Associate

Delhi Technological University

August 2018 - August 2019 New Delhi, India

- Project : Development of optical components and modules designed for next generation optical communication systems
- Worked on the use of signal processing, communication theory, and optical techniques in designing high capacity optical multiuser/multichannel systems and networks.
- Documented technical and engineering projects and proposals.
- Tool Used : OptiSuite, Lumerical Suite

International Summer Research Intern

National Chung Cheng University

May 2018-July 2018 Chiayi, Taiwan

- Developed a highly reflective GeSn based resonant cavity structure in the SWIR region for group IV photonic devices (GeSn based emitters sensors in the mid infrared region)
- Tool Used : COMSOL
- Develop expertise in working with fabrication processes like Photolithography and RIE(Reactive Ion Etching) for various MEMS-based applications.

SUMMARY

Recepient of prestigious Erasmus Mundus Joint Master Degree Scholarship. Currently looking for graduate role related to Telecommunication & Network Engineering.

TECHNICAL SKILLS

Python/C++/C/R/TCL/JS
Git Version Control and GitHub
MATLAB COMSOL Optisuite
Lumerical OptSim LabVIEW

KLayout & L-Edit ns2/ns3 QualNet
VHDL EAGLE LTSpice Multisim

CERTIFICATIONS

Silicon Photonics Design – edX
Cloud Computing Basics - Coursera
Introduction to Cloud Computing - Coursera
Industrial IoT on Google Cloud Platform

COURSE MODULES

- Optical & Wireless Networks
- Semiconductor Device Modeling & Technology
- Microelectronics Engineering
- Microprocessor & Interfacing Lab (Embedded Systems)
- Digital Logic Design Lab
- Lab of Network S/W (SDN, NFV)
- Lab of Traffic Engineering (RIP, OSPF, BGP , MPLS & VPN)
- Design of Access, Metro & Core Networks
- Fundamental of Optical Communication
- Photonic Technologies
- Photonic Integrated Circuits
- Microwave Photonics
- Electromagnetic Fields & Propagation
- Communication Networks & Network Security
- Antenna & Wave Propagation Lab
- 5G Signal Processing
- Broadband Wireless Networks
- Modelling & Characterization of Fiber Photonic Devices

EXPERIENCE

Pre-Incubatee

Incubation Center for Medical Electronics, Indian Institute of Technology (IIT)

May 2017-July 2017 Patna, India

- Project: Micro Thermal Energy Harvesting Systems for Biomedical Implants
- Developed a minituarised autonomous thermal energy harvesting circuit for Pacemaker.
- Tool Used : HSPICE (180-nm CMOS technology) •

Telecom Summer Intern

Advanced Level Telecom Training Centre (ALTTC)

May. 2016 - Jul. 2016 Ghaziabad, India

- Acquainted with the working of Mobile technologies like GSM, CDMA, 3G, 4G LTE, and LTE Advanced and Wi-Max.
- Working exposure to the Modern Transmission Technologies like OFC,SDH, NG SDH, DWDM, GPON, FTTH, and Next-Generation Networks where working of Digital Exchanges, soft Switch, and IMS were explained with real-time systems.
- Get accustomed to different wireless communication technologies, Router Configurations, and a number of networking protocols like TCP/IP, HTTP/S, SSL, SFTP, SNTP, etc.

RELEVANT PUBLICATIONS

Development of a novel hybrid PDM/OFDM technique for FSO system & its performance analysis
Kaur, G., Srivastava, D., Singh, P., & Parasher, Y. (2019). .Optics & Laser Technology,Elsevier 109, 256-262.

Examining Current Standards for Cloud Computing and IoT
Parasher, Y., Kedia, D., & Singh, P. (2018). In Examining Cloud Computing Technologies Through the Internet of Things. IGI Global.

Modelling of structural and material parameters of optical planar waveguide to control birefringence
Parasher, Y., Kaushik, A., Kaur, G., & Singh, P. (2018, November).In Latin America Optics and Photonics Conference (pp. Th4A-36). Optical Society of America.

Design of Multichannel Optical OFDM System Using Advanced Modulation Techniques
Kaur, G., Kumar, A.,Parasher, Y., & Singh, P. (2018). . Journal of Optical Communications, Degruyter.

Design and Implementation of Electro-Optic 2 x 2 Switch and Optical Gates using MZI
Kaur, G., Rani, N.,Parasher, Y., & Singh, P. (2018). . Journal of Optical Communications, Degruyter.

Green Smart Security System
Parasher, Y., Kaur, G., & Singh, P. (2019). In : Emerging Green and Smart Technologies for Smart Cities, CRC Press , Taylor & Francis Group.

Green Smart Town Planning
Parasher, Y., Kaur, G., & Singh, P. (2019). In : Emerging Green and Smart Technologies for Smart Cities, CRC Press , Taylor & Francis Group.

Green Smart Environment for Smart Cities
Parasher, Y., Kaur, G., & Tomar, P. (2019). In : Emerging Green and Smart Technologies for Smart Cities, CRC Press , Taylor & Francis Group.

LAB EXPERIENCE

Optical spectrum analyzer | OTDR | Oscilloscope | Function Generator | Vector Network Analyzer | BERT | Hubs, Switches, & Routers | Microcontrollers - Arduino Uno, ATMEGA16

ACHIEVEMENTS

Erasmus Mundus Scholarship
Recepient of prestigious Erasmus Mundus Joint Master Degree Program in Photonic Integrated Circuits, Sensors & Networks (PIXNET).

Research
Selected as an International Summer Research Intern (2018) at the AIM-HI Institute, National Chung Cheng University, Chiayi, Taiwan.

Entrepreneurship
Selected as a pre-incubatee in the Incubation Center for Medical Electronics at Indian Institute of Technology(IIT), Patna, India.

Scholastic Award
Awarded Merit Certificates by (CBSE) & (KVS) for being in the top 0.1% of candidates passing that subject in All India Secondary School Examination in 2010.

STRENGTHS

Committed and Flexibility | Consistent and Adaptable | Leadership and Communication Skills | Innovative, Creative and Proficient

REFEREES

Available on Request