

RESUME

ASHOK KUMAR P

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Educational Qualification

COURSE	INSTITUTION	AUTHORITY	MON & YEAR OF COMPLETION		% /CGPA
P.G (Current)	Anna University (MIT), Chennai	Anna University, Chennai			
U.G	MEPCO Schlenk Engg College	Anna University, Chennai	APR	2012	8.03
H.S.C	Valliappa Vidhyalayam	TN State Board	MAR	2008	93.25
S.S.L.C	Valliappa Vidhyalayam	TN Matriculation	MAR	2006	89.91

Academic Background

Computer Science: Computer Architecture, Operating Systems (UNIX), Data Structures, Parallel Computing, Algorithms, Cloud Computing, Web Development ...

Programming Languages : C, C++, Python, MATLAB, AVR Assembly, PIC Assembly; HTML & CSS.

Image Processing: Frequency Analysis, Edge Detection, Optical Flow Analysis, Segmentation, Classification, Wavelets ...

Signal Processing: Fourier Analysis, Wavelet Transform, Laplace Transform, Z Transform, Harmonic Analysis, Digits Signal Processing, ...

Electronics: Circuit Design and Analysis, PCB Design, Microcontrollers (PIC & AVR), Microprocessors (8086, Z80), FPGA, Verilog, ...

Post Graduation Course Details

Discipline	M.Engg. Computer Science and Engineering
Semester wise GPA	1 st 7.39 2 nd 6.4
Average Aggregate (CGPA)	6.87 (till 2 nd Semester)
History of Arrears	Nil
Research Projects	Fault Tolerance in Multi-Core Processors
Electives Studied	Cloud Computing Soft Computing Ethical Hacking and Digital Forensics
Duration	2012-2014 (<i>Expected</i>)

Under Graduation Course Details

Discipline	B.Engg. Electronics & Communication Engineering
Classification	First Class
Average Aggregate (CGPA)	8.03
History of Arrears	Nil
Research Projects	Traffic Monitoring and Control Using Image Processing
Projects	<ol style="list-style-type: none">1. Dynamic Encryption and Decryption2. LCF Meter3. Adaptive 1D Run-Length Encoding
Electives Studied	Numerical Methods Cryptography and Network Security Internet and Java Digital Image Processing Embedded and Real Time Systems Optical Networks
Duration	2008-2012

Projects

2013-Present Lead Acid Battery Desulphator

Desulphator Circuit possibly using 555 or AVR along an with intelligent lead acid battery charger (V2) and automatic switch over to inverter (SMPS Based) upon power failure. This is a power supply unit for my work bench with an aid of 2x7.2AH VRLA and 1x9AH flooded Lead Acid batteries.

2012 Intelligent Lead Acid Battery Charger

Designed Current cum Voltage controlled Lead acid battery charger with quick switch over upon power failure. The circuit powered my Asus RT N13U B1 Router, Music Player, etc.

2012 Adaptive 1D Run-Length Encoding

Compression of binary image using 1D Run-length encoding. The encoding is adaptive whose word length is dictated by the property of the image under compression.

2011 Lithium Battery based Emergency Light

Designed Li-Ion Battery charger cum protection circuit and modded the emergency lights to give approx. 24 Hr backup.

2010 Dynamic Encryption and Decryption (DYED)

A dynamic encryption algorithm to encrypt message streams in multiple levels with each level being visualized as a rotating cylinder (inspired by German's Lopez Cipher) whose speed is dictated by a combination of arriving message, provided key and previous ciphered data.

2009 LCF Meter

Calculation of Inductance & Capacitance using the transient property of Inductor and Capacitor respectively, frequency using incremental counting. All the calculations are performed using discrete ICs.

Research:

2013-Present Vehicle Tracking

Vehicle tracking using image processing by object detection via optical flow analysis.

2013-Present Fault Tolerance in Multi-Core Processors

Implementation of Fault-Tolerance in commercially available desktop processors with little or no hardware change.

Anna University (MIT Campus), Chennai, India

2012

Traffic Monitoring and Control using Image Processing

Monitoring of Traffic using optical flow along the route leading to the tracking and classification of the vehicle, computation of its speed, direction of travel and vehicle number detection

Mepco Schlenk Engineering College - Anna University, Chennai, India

Languages:

Tamil	Native
English	Full Professional
Hindi	Elementary
German	Elementary

Computer Skills:

OS Platforms	Linux/Unix (Debian, Red Hat, etc.), Windows, DOS
Programming	C/C++, Python, AVR, PIC, Verilog, VHDL
IDE	Netbeans, Dev C++, Eclipse
Documentation Technologies	HTML & CSS, XML
Tools	SCons, vim, Notepad++
Scientific	Matlab, Eagle, Multisim & Ultiboard
Version Control System	Mercurial
Typography	~45wpm, Open Office, Microsoft Office

Technical Skills

Circuit Design, Analysis and Debugging, PCB Design

Interests and Activities

- Processor Architecture, Neural Networks, Operating System, micro-Kernel, Computer Vision, Open Source Hardware and Software, Literature
- Member of Association of Computing Machinery (ACM)

- Office Bearer of Health Club during 2009
- Yoga, Meditation.

Hobbies

Reading English Literatures, Writing, Listening Music, Designing Electronic Circuits, Learning

Personal Details

Name : ASHOK KUMAR P
 Gender : Male
 Date of Birth : 24 Feb, 1991
 Age : 22
 Weight : 65 Kg
 Height : 170 cm
 Nationality : Indian
 Other names : ParokshaX, Paroksha.X
 Guardian's Name : SUGANTHI P
 Guardian's Occupation : Agriculture

Address Details

Communicate to "Present Address"

PRESENT ADDRESS	PERMANENT ADDRESS
44 (old No 41), Ground Floor, Vinobaji 11 th Street, Hastinapuram, Chennai - 600064 Tamil Nadu, India	10-3-11A Uppupalayam, Erode-Sankagiri Main Road, Sanyasipatti (POST), Sankari West - 637303 Tamil Nadu, India

DECLARATION

I do hereby declare that the particulars of information and facts stated herein above are true, correct and complete to the best of my knowledge and belief.

Thank you,

Place : Chennai
Date : 24 Jul, 2013

Yours Truly,
Ashok Kumar P.