

# Curriculum Vitae

## Dr. Antony Louis Piriya Kumar DOUGLAS



**Where my skill sets can be used in your organization**

Experience in International projects (Automotive engineering)  
 Technology roadmap for strategic growth  
 Patent analysis for new product development  
 Competitor patents analysis for infringement, Widening scope of patents, feature-wise analysis

**Position specific skills**

Interdisciplinary technology roadmap for multiple divisions  
 Strategic decision on new products  
 Patent process setup for the organization

**Innovation Management**

Strategic focus on budget allocation for multiple technologies  
 Held positions: Technical expert, Project Manager, Patent Manager in Siemens for 12+ years  
 Technology evangelisation

**Top three talents**

1. Proven industrial knowledge – Patents 7 (granted) 12 (in progress) 25 (submitted)
2. Consistent academic records – Ph.D. (Magna cum Laude), Masters. (Record). Graduation (Gold medallist)
3. Decades of technical expertise – Programming in Basic (1983) to Python (2016) on DSP platforms to Supercomputers (Cray T3E) by applying Signal/Image processing and data science to Smart diagnostics systems

**Work experience**

1. Technical specialization in mobile robotics, embedded programming, computer vision
2. Understanding regional and global market requirements
3. Experience with USA, European and Asian customers on collaborative research
4. Worked with Continental on “Lane departure warning” project (Project Manager 10 years before)
5. Working with multiple Business units securing the strategic growth
6. Setting up of various patent related processes such clearance for new product development against infringement
7. Knowledge and training in international business compliance

**Dates Occupation Name of employer**

July 2004 – present (12+) Research and technology centre (RTC) and Siemens Healthcare Technical Expert / Member Technical Staff and Patent Manager(5 year period)  
 Siemens Healthcare Pvt. Ltd., Siemens AG, 105, Electronics city, Bengaluru 560100, India

Jan 2004 – July 2004 (A) and Oct 1989 – May 1996 (B) in Academics and research  
 Professor (A) and Lecturer (B)  
 PES University, Bengaluru, India (A) and Pondicherry University, India (B)

**Education**

**Dates Ph.D**

June 1996 – September 2003 (With DAAD scholarship)  
 Image understanding (Magna cum Laude from IPVS, Uni-Stuttgart, Germany)

**Dates Masters**

Jan 1993 - June 1994 (With GATE scholarship)  
 Multiprocessor scheduling (completed with the record time of 1.5 years in the history of IIT-M (Indian Institute of technology - Madras)

**Dates Graduation**

September 1996 – August 1998  
 Computer science (completed with Gold medal – university topper)

<b>Skill sets</b>	Understand	Speak	Write																												
Languages																															
German	B2 Intermediate User	B2	B2																												
Management skills	<table border="1"> <tr> <td>Project management</td> <td>Technical – ref projects section Project management – team management++</td> </tr> <tr> <td>Financial management</td> <td>Bid management (technical part)– E passport national bid Sales - Through w all imaging system LoA exam – completed successfully</td> </tr> <tr> <td>Innovation management</td> <td>Patent manager – Invention evaluation, training Inventor – Patents granted 7, 12 in progress</td> </tr> </table>			Project management	Technical – ref projects section Project management – team management++	Financial management	Bid management (technical part)– E passport national bid Sales - Through w all imaging system LoA exam – completed successfully	Innovation management	Patent manager – Invention evaluation, training Inventor – Patents granted 7, 12 in progress																						
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Technical skills and competences	<p>Areas of Specialisation: Real-time vision based analytics, novel Sensor applications, wireless cameras platforms, Thermal imaging, Signal processing, Multiple hardware platform based performance optimization</p> <table border="1"> <thead> <tr> <th><b>Customer Industry</b></th> <th>Key Project works/Innovation/Prototypes</th> </tr> </thead> <tbody> <tr> <td>Automotive safety</td> <td>Pedestrian detection, Lane departure warning system</td> </tr> <tr> <td>Transportation Infrastructure</td> <td>Vehicle Detection, Traffic queue length detection Static Vehicle Detection and Smoke detection in tunnels</td> </tr> <tr> <td>Transportation logistics</td> <td>Baggage claim alert system in airports</td> </tr> <tr> <td>Infrastructure safety</td> <td>Multi cameras based human tracking, Video stitching, VIP Building security assessment</td> </tr> <tr> <td>Metals and mining</td> <td>Billet cutting</td> </tr> <tr> <td>Water technology</td> <td>Bioluminescence based poison detection, Arsenic detection kit</td> </tr> <tr> <td>Food and beverages</td> <td>Curd quality measurement, Bottle cleaning systems</td> </tr> <tr> <td>Drive technology</td> <td>Energy saving monitor</td> </tr> <tr> <td>Electrical and electronics</td> <td>Embedded vision applications</td> </tr> <tr> <td>Public sector</td> <td>Security and surveillance applications</td> </tr> <tr> <td>Medical Imaging</td> <td>Urine strip analysis, Length estimation in X-ray images, Image analysis of Brain, Coronary arteries, lung fissure, Liver, Kidney, Spleen in CT and right ventricle in MR images</td> </tr> <tr> <td>Healthcare</td> <td>Personalized 3D printed stents, ST segment analysis in ECG</td> </tr> <tr> <td>Rail automation</td> <td>Stop signal detection, Fog penetration system</td> </tr> </tbody> </table>			<b>Customer Industry</b>	Key Project works/Innovation/Prototypes	Automotive safety	Pedestrian detection, Lane departure warning system	Transportation Infrastructure	Vehicle Detection, Traffic queue length detection Static Vehicle Detection and Smoke detection in tunnels	Transportation logistics	Baggage claim alert system in airports	Infrastructure safety	Multi cameras based human tracking, Video stitching, VIP Building security assessment	Metals and mining	Billet cutting	Water technology	Bioluminescence based poison detection, Arsenic detection kit	Food and beverages	Curd quality measurement, Bottle cleaning systems	Drive technology	Energy saving monitor	Electrical and electronics	Embedded vision applications	Public sector	Security and surveillance applications	Medical Imaging	Urine strip analysis, Length estimation in X-ray images, Image analysis of Brain, Coronary arteries, lung fissure, Liver, Kidney, Spleen in CT and right ventricle in MR images	Healthcare	Personalized 3D printed stents, ST segment analysis in ECG	Rail automation	Stop signal detection, Fog penetration system
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Projects with technical contribution and management																															
Computer skills and competences	<p>Advanced proficiency levels:  Programming: C, C++, C with MPI/real-time tasks, Prolog, Matlab, R programming, Python  Operating systems: Unix, Linux, Microsoft windows  Hardware platforms: PCs, Embedded hardware (smart camera) to Supercomputers (Cray T3E)</p>																														
Membership	IEEE Senior member and ACM member																														
Countries visited Passport/Visa/	USA (10 years B1 visa -completed), Germany Schengen (validity over), England, Sweden, Austria Non-project visits: France, Italy, Vatican, Switzerland, Netherlands, Belgium, Egypt, Singapore																														
Additional information	References available upon request																														
Address Telephone(s)	16, SLV Layout,9 <sup>th</sup> main, Roopena Agrahara, Bengaluru 560068, India Mobile:+91 9845925132																														
E-mail(s)	<a href="mailto:dalpk@yahoo.com">dalpk@yahoo.com</a>																														
Nationality	Indian																														
Marital status	Married (living with wife and two daughters).																														