## Mohankumar S.

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# Objective

Seeking for a position to work with challenging problems in Information Technology, especially in Research and Development with the knowledge and programming skills acquired and thereby grow with the organization.

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#### **Academic Details**

MCA in Madras Christian College (Autonomous), Chennai affiliated to University of Madras (2012–2015)	85%
B.Sc. (Computer Science) in S.I.V.E.T. College, Chennai affiliated to University of Madras (2008-2011)	63%
HSC in Sri Ramakrishna Mission Boys Higher Secondary School, Chengalpattu under the Tamil Nadu State Board (2007-2008)	60%
SSLC in St. Joseph's Boys Higher Secondary School, Chengalpattu under the TamilNadu State Board (2005-2006)	73%

#### **Skills**

- Programming Languages: C, C++, JAVA, C# .NET & Python (beginner)
- Mobile Platforms: Android (Android Studio with Java)
- Scripts: Windows batch scripting & Linux Shell scripting
- Designing and Scripting Languages: HTML, XML, PHP, JavaScript, CSS
- Servers: Apache web server & Microsoft IIS
- Databases: Oracle, MySQL, MS-SQL Server, Access DB
- Operating Systems: Windows (upto Windows 10 HSL & Windows Server 2016), Linux (mostly familiar with Debian family)
- Tools and IDEs: MS Visual Studio 2015 & 2017, NetBeans 8.2, Android Studio 3.2, ImageJ, Slicer, MATLAB, Adobe Photoshop CS 6.0.
- Content Management Systems (CMS): Drupal 7.54 and Wordpress 5 (Basic)

### **Experience**

# Healthcare Technology Innovation Centre (HTIC), IIT – Madras, (Oct 2015 to present)

- Company Overview:

HTIC, a multi-disciplinary R&D centre, is a joint initiative of IIT-Madras and Department of Biotechnology (DBT), Government of India that brings together technologists, engineers, doctors and healthcare professionals, industry and government to develop healthcare technologies for the country. The Centre is located in IITM Research Park which has a vibrant technology ecosystem.

In addition to technology research and development, HTIC works closely with industry in developing R&D solutions, joint development of technology products, technology assessment and evaluation. To know more about the Healthcare Technology Innovation Centre (HTIC), visit <a href="http://httc.iitm.ac.in/">http://httc.iitm.ac.in/</a>

- Designation:

**Project Engineer** 

- Projects Worked on:
  - Sonio Robotics, Ultrasound device & 3D Reconstruction library integration (C++)
  - o Retinopathy of Pre-maturity
  - o Automated Diet suggesting web-application (Drupal 7.54)
  - Artsens Pendroid (android version)
  - o iQuant Kiosk Windows
  - o iQuant Android platform ground study
  - o iQuant Windows Embedded
  - o iQuant Linux (C++ with IDS camera integration)

### Ameex Technologies - OMR, Chennai, 9 months (internship).

- Designation:

**Project Engineer** 

- Projects Worked on:

Content Migration of Ubercart Products and User based Discounts – Web application (Drupal 7.54)

#### **Presentations in International Conferences and Publications**

Presented the paper by S. Kulasekaran, Feminna Sheeba, Joy John Mammen, B. Saivigneshu, S. Mohankumar, entitled Morphology Based Detection of Abnormal Red Blood Cells in Peripheral Blood Smear Images in the 7<sup>th</sup> WACBE World Congress on Bioengineering 2015, National

- University of Singapore, Singapore and was published in the IFMBE Proceedings, Springer, Vol. 52, pp. 57-60, DOI: 10.1007/978-3-319-19452-3\_14.
- The paper by Feminna Sheeba, Robinson Thamburaj, Joy John Mammen, Mohan Kumar, and Vansant Rangslang entitled Convex Hull Based Detection of Overlapping Red Blood Cells in Peripheral Blood Smear Images was published in the IFMBE Proceedings, Springer, Vol. 52, pp. 51-53, DOI: 10.1007/978-3-319-19452-3\_14.
- Presented the poster by Nithish R., Kathick S., Mohankumar S. entitled Watershed Transforms used in the Segmentation of Cells in Peripheral Blood Smear Images in the 7<sup>th</sup> WACBE World Congress on Bioengineering 2015, National University of Singapore, Singapore.

### **Projects Done (on College)**

- Online Electricity Board Management System: Case-Study in III Sem
  - Web site for Online Electricity Board Management System with HTML, Java Script and CSS
- Shop Inward-Outward Management system: Freelancing Project
  - To verify the stock details including the stock inward-outward details for various items
  - Language: C# with SQL database
  - Platform: Microsoft Visual Studio 2010
- Online retrieval of PDF files from the Server: Project done for the College
  - To retrieve PDF files from the PDF Database, and show it in the Browser
  - Language: C# with ASP .Net
  - Database: SQL database
  - Platform: Microsoft Visual Studio 2010

# • Segmentation of Overlapping Red Blood Cells in Blood Smear images: as part of the Software Development Lab in V Semester

- The project aims at segmenting two or more Overlapped Red Blood Cells in the Blood Smear images. The dip points where the cells overlap is found by analyzing the distance between the centroid and the boundary points of the overlapped blob. To get expected results the blobs are smoothed using morphological operations before analysis. Based on the number of dip points the overlapped cells are split.
- The Domain of the project is Image Processing
- The platform used is Java with NetBeans 8.0

# • Content Migration of Ubercart Products and User based Discounts: Project in VI Semester

- The project aims at developing a Web Application for a Sensor company to maintain their manufactured sensor products. The Web application is developed using Drupal 7 as front-end and MySQL as back-end. The Site was mainly developed in order to help the user to explore the sensor company's latest sensor product releases, products detailed information and to provide the technical support for the customers. The site also provides online purchasing facilities to order the sensor products and to give discounts for the customers.

### **Extra-Curricular Activities**

- Type Writing lower level (distinction)
- System hardware & Networking

#### **Personal Details**

DOB: Oct 15, 1990

Sex: Male

Languages known: Tamil & English

Nationality: Indian Marital Status: Married

#### **Declaration**

I hereby declare that the details given above are true to the best of my knowledge and understanding.

Place: Chennai

Date: (Mohankumar S.)