LALAM RITHISH || NA13B038
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EDUCATION

PROGRAM	INSTITUTION	CGPA/%	YEAR
Dual Degree in **Naval Architecture & Ocean Engg.** Minor: **Industrial Engineering**	Indian Institute of Technology, Madras	6.82	2018
XII (Board of Intermediate Education)	Ascent Junior College, Visakhapatnam	91.5%	2012
X (ICSE)	St.Aloysius Anglo Indian High School	83.42%	2010

SCHOLASTIC ACHIEVEMENTS

- Ranked among the top **0.9%** of 13,00,000 applicants for **Joint Entrance Examination, Mains** **(2013)**
- Placed among the top **1%** of 3,95,000 applicants in the Andhra Pradesh Common Entrance Test (EAMCET) **(2014)**
- Awarded **Gold Medal** at district level by Soft'zen for student competition which had participation of **500+ students** **(2008)**

PROFESSIONAL EXPERIENCE

Data Analyst
IFMR-Capital
(Dec 2016 - Jan 2017)

- Developed a mass scale **data mining application** which converts **10 major regional language**s to English
- Built a foolproof **model in Python** which is capable of reading the content of a source file automatically
- The model has been integrated with database of **1000000+ words** and it get updates itself with any new words
- Model is aimed at **sentiment analysis** of news which is widespread across **29 states** for more than **600+ newspapers**

Product Development
Planys Technologies
(May 2016 - Jul 2016)

- Developed a reliable **underwater connectors** which aids in transferring power between two underwater systems
- Optimized the design and attained **cost efficiency of 75%** by **3D modeling** and **strength simulations** on Solidworks
- Established a systematic procedure for **manufacturing** and **testing** of the product

In-Plant Trainee
Mazagon Dock
(Jun 2015- Jul 2015)

- Increased tug boat **stability** by **30%** by performing the initial design and stability calculations using **AVEVA Marine**
- Training aided a good understanding of Standard industry practices, equipment and routines at site
- Analyzed material and work flow through detail studies of Project planning, Quality control and Materials management

SKILLS

Programming: C , Python , Java | **Software**: Solidworks, AutoCAD , MATLAB , Foran , MS-Excel

POSITIONS OF RESPONSIBILITY

Team Head AUV Amogh
(Dec 2016 – Aug 2017)

- Leading a team of **25+ members** of different streams and modules in developing miniature AUV of IIT Madras for international competition **AUVSI Robosub-2018** and National competition **NIOT SAVe- 2018**
- **Mentoring** the students with necessary skills in **3D modeling** and **engineering solutions** for underwater robotics
- Spearheaded in the construction of **Amogh 3.0** which can navigate autonomously upto a depth of **25m**

Monitoring Committee Head, Oceana 2016-17

- Attained highest footfall ever by 25%, leading a team of **12** core members and **35** coordinators(**15% leaner** than 2016)
- **Reduced** the **expenditure** by more than **50%** by implementing strict accountability in system
- Boosted participation of freshers by more than 50% by introducing special **mentor-buddy** programs and workshops

Core Member Team Events Wavez 2015-16

- Headed a team of **25** coordinators and **20** volunteers to organize **15+ events** for Wavez 2016
- Envisioned and executed new events like **RC boats** and **Autonomous water craft** with prizes worth **INR 50000**
- Proposed and initialized new workshops like **Ansys** and **Roboceana** which had **300+** participants

Coordinator Facilities Saarang 2015

- Led a team of **20** students & over saw **5** Professional Shows during cultural festival of IIT Madras
- Managed concerts with a **budget of INR 70Lacs** through efficient networking, marketing and resourcing
- Successfully handled new responsibilities of Internal Publicity by optimal use of manpower and resources

PROJECTS & RESEARCH EXPERIENCE

M.tech Thesis
Guide: **Dr.V Anantha Subramanian**
(Jun 2017- Present)

Design and stability analysis of a cruise vessel for backwaters

- Designed a 12m day cruiser vessel and performed stability calculations as per DNV classification in FORAN software
- To estimate the resistance and propulsion of the vessel in backwaters by hydrodynamic analysis in CFD

Student competition
. Guide:**Dr.T.Asokan**
(Sept 2014 – Contd.)

Development of an Autonomous underwater vehicle (AUV) for student competition

- Conceptualized, designed and fabricated various subsystems to accomplish pre-defined tasks of competitions like NIOT SAVe and AUVSI Robosub using Image Processing and Passive SONARs
- Achieved a reduce in overall drag of the vehicle, **AUV Amogh 3.0** by **19 %** and increased overall efficiency

Course Project
Guide: **Dr.Sannasiraj**
(Jan 2013 – Contd.)

Economic assessment for installation of Sea based Wave Energy Convertor

- Evaluated wave characteristics data along the Indian coastline, over **6 potential sites**, for installing energy converter
- Developed a **mathematical model** and analyzed the **power output, cost effects** along the coast

OTHER ACTIVITIES

Co-curricular

- Member of the team representing IIT Madras at **SAVe** (Student Autonomous Underwater Vehicle) **National Competition 2014** & **2016-17** conducted by National institute of Ocean Technology (NIOT)
- Exhibited our AUV with **50+** other reputed companies at Electronics For You Expo conducted in 2015 at New Delhi

Extra-curricular

- Placed **3rd** in a three round knockout quiz ,"**Triathlon**" an event from Wavez-2014
- Certified as **NCC** (National Cadet Corps) B certificate holder; trained on drill, first-aid and weapon handling

Social Cause

- Conducted **Marine clean up** with **bhoomi foundation** as part of Wavez'15&'16 inspired from **Swacch Bharath**
- Organized and participated in various **Health & Hygiene camps** for rural people at school level