

# ABHINAYA S B

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## EDUCATION

**National Institute of Technology, Tiruchirappalli (NIT Trichy)**

India, Jul 2015 - May 2019

Bachelor of Technology (Honours) in Computer Science and Engineering

CGPA: **9.74**, Rank: **2** / 101

*Maintained GPA above 8.5 in every semester and took 9 extra credits to satisfy requirements for Honours*

## WORK EXPERIENCE

**Qualcomm**, Software Architecture team

Bengaluru, India, Jul 2019 - Present

- As **Engineer**, designed a prototype to overcome resource availability constraints for concurrent AI workloads on Snapdragon; added support for testing the AI engine across 2 simulators, 1 emulator, 2 Linux and 1 Windows based platforms.
- As **Associate Engineer**, developed a suite of tests and support tools for the Snapdragon AI engine that identified 5 critical HW issues; presented work at internal conferences, Qbuzz (India) and ML Summit (international) with 3K+ total attendees.
- As **Interim Engineering Intern**, analyzed Google's Pixel Visual Core based image capture to derive architectural insights.

## TECHNICAL STRENGTHS

<b>Additional Courses</b>	Usable Security, Human Computer Interaction, Privacy & Security in Online Social Media
<b>Programming</b>	C, C++, Python, Java, Tensorflow, HTML/CSS, Javascript, Three.js, Angular.js
<b>Software</b>	Android Studio, MATLAB, Network Simulator, Trace32, Zotero, L <sup>A</sup> T <sub>E</sub> X

## RESEARCH & PUBLICATIONS

**Chatbot for Education**, Prof. Jaya Nirmala

NIT Trichy, Jan 2019 – May 2019

- B.Tech. Thesis* on A Question Answering and Quiz Generation Chatbot for Education, implemented using NLP techniques in Python. Presented at Grace Hopper Celebration India, 2019, and published in IEEE Xplore. [**Paper**]

**System-level Optimization of ADV algorithms**, Prof. Mittal

IIT Hyderabad, Dec 2018 – Jan 2019

- Conducted experiments for system-level optimization of ADV perception algorithms (YOLOv3) for embedded systems (NVIDIA Jetson Xavier & Nano) using ROS. Poster presented at Intel India Research Colloquium, 2019.

**Security in GPUs**, Prof. Mittal

IIT Hyderabad, Dec 2017 - Jan 2018

- Co-authored a survey paper on security in GPUs, published in Journal of Hardware and Systems Security. [**Paper**]

**Cluster Head Selection Algorithm for WSNs**, Prof. Nithya

NIT Trichy, Oct 2017 – Nov 2017

- Developed and analyzed a clustering algorithm using MATLAB that indicated an improvement of the WSN network lifetime by 150% compared to LEACH. Presented at GUCon 2018, and published in IEEE Xplore. [**Paper**]

**Database to Animation Framework for Chemistry**, Prof. D.B. Phatak

IIT Bombay, May 2017 – Jul 2017

- Designed a Three.js based framework to illustrate Chemistry concepts via 3D animations, during *Ekalavya* internship (selected based on merit). Supported by National Mission on Education through ICT (NME-ICT), India. [**Report**]

## ACADEMIC ACHIEVEMENTS

<b>2016</b>	<b>Institute topper</b> award for obtaining the highest CGPA (out of ~800) in 1 <sup>st</sup> year B.Tech. at NIT Trichy
<b>2016</b>	<b>Chainulu Medal of Excellence</b> for obtaining 1 <sup>st</sup> rank (out of 101) in 1 <sup>st</sup> year B.Tech. CSE, NIT Trichy
<b>2015</b>	Rank <i>1006</i> (out of 1.3M) in <b>JEE Main</b> conducted by Central Board of Secondary Education, India
<b>2015</b>	Awarded the <b>KVPY</b> scholarship for research in basic sciences with rank <i>626</i> (out of 50K) by IISc, India

## POSITIONS OF LEADERSHIP

<b>2021</b>	<b>Vice President, Public Relations</b> , <i>Qonverse</i> , Toastmasters club at Qualcomm, Bengaluru, India
<b>2017-18</b>	<b>Head</b> , <i>Content for Festember</i> , annual cultural extravaganza of NIT Trichy
<b>2018-19</b>	<b>Manager</b> , <i>Content for Pragyan &amp; Computer Science and Engineering Association</i> , NIT Trichy
<b>2015-16</b>	<b>Executive Committee Member</b> , <i>National Service Scheme</i> , CSE dept., NIT Trichy