

S3 M.Tech Student,  
Computer Science And Engineering,  
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## Vivek Anand T Kallampally

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### Interests:

Computational Complexity, Data Structures and Algorithms, Operating Systems, Embedded Systems, Web

### Work Experience:

#### Broadcom Communications Technologies Pvt. Ltd.

Bangalore

#### Engineer - Software Development

1<sup>st</sup> July 2013 - 4<sup>th</sup> July 2014

- Worked in implementing a flow control module for Wifi Host Driver for PCIe based wifi chips.
- Worked in implementing intra bss packet transfer in SoftAP mode for PCIe based wifi chips.
- Worked in implementing power save mode support in SoftAP mode for PCIe based wifi chips.
- Worked in designing the software architecture of a low power wifi chip.

### Academic Qualifications:

<b>IIT Kanpur, India</b>	2014-Present
M.Tech. Computer Science and Engineering Courses Taken : Maths for Computer Science, Design and Analysis of Algorithms, Computational Number Theory and Algebra, Linear Programming, Approximation Algorithms, Computational Complexity, Randomized methods in Computational Complexity	: CPI 8.00
<b>NIT Calicut, India</b>	2009-2013
B.Tech. Computer Science and Engineering	: CGPA 8.84
<b>St. Antony's Public School &amp; Junior College, Kottayam , India</b>	2007-2009
AISSE from Central Board of Secondary Education (CBSE) (Std. XII)	: 92.6 %
AISSE from Central Board of Secondary Education (CBSE) (Std. X)	: 90.2 %

### Skill Set:

Programming Languages	C, C++
Parser Generator	Lex, Yacc
Database	MySQL
Web Scripting	Basics of PHP, HTML and CSS
OS	Windows, Linux

### Academic Project Details:

	Isolation Problem in Graphs
Organization	IIT Kanpur
Duration	January 2015 - Present
Description	Studying about possibility of derandomizing isolation lemma for graphs which will lead to efficient parallel algorithm for matching in graphs. Also exploring the possibility of computing a min unique weight function for graphs which will give a UL algorithm for reachability.
Guide	Prof Raghunath Tewari

	<b>Experimental Operating System and Virtual Machine</b>
Organization	NIT Calicut
Duration	July 2012 – May 2013
Description	Design and implementation of an experimental operating system and underlying architecture with basic features like multiprogramming, virtual memory and file system as part of developing a complete coursework for Operating Systems Laboratory. The project is hosted at <a href="http://xosnirc.github.io">xosnirc.github.io</a> . The project also included design and implementation of two language compilers, one for programming the operating system and one for programming application programs to run on this operating system.
Environment	C, Lex, Yacc

	<b>Compiler</b>
Organization	NIT Calicut
Duration	July 2011 – November 2011
Description	A compiler for a Simple Integer Language (SIL). SIL included two basic data types Integer and Boolean, features like if, if-else, while, arrays and functions. Functions take any number of arguments and return a single value. Arguments can be passed by value or by reference. Function recursion is also implemented.
Environment	C, Lex, Yacc

	<b>Bulls N Bears</b>
Organization	NIT Calicut
Duration	September 2011 – October 2011
Description	This project delivered the website <a href="http://bullsnbears.tathva.org/">http://bullsnbears.tathva.org/</a> . It was a stock market simulation game as part of Tathva 11 a technical fest. The virtual market was synchronized with the actual NIFTY market. The players could buy, sell, short sell and cover equities over a period of 1 month.
Environment	HTML, PHP, CSS, MySQL

### **Awards and Achievements:**

- Was awarded the meritorious 0.1% certificate by AISSCE and AISSE for scoring 100 in Mathematics.
- GATE 2013 CSE All India Rank 42
- GATE 2014 CSE All India Rank 86