S4 M.Tech Student,
Computer Science And Engineering,
IIT Kanpur
Phone: +919454798577
E-mail: vivekzhere@gmail.com

Vivek Anand T Kallampally

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

WORK EXPERIENCE
Broadcom Communications Technologies Pvt. Ltd. **Bangalore**
Engineer – Software Development ***1st July 2013 - 4th 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

Qualification	Institute	Year	Cumulative Grade/Percentage
M.Tech (CSE)	IIT Kanpur	2016	8.00/10 (CPI)
B.Tech (CSE)	NIT Calicut	2013	8.84/10 (CGPA)
XII (AISSCE)	St. Antony's Public School & Junior College (CBSE)	2009	92.6 %
X (AISSE)	St. Antony's Public School & Junior College (CBSE)	2007	90.2 %

RELEVANT COURSES
- Approximation Algorithms
- Computational Complexity
- Computational Number Theory and Algebra
- Design and Analysis of Algorithms
- Linear Programming
- Maths for Computer Science
- Randomized methods in Computational Complexity

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

ACADEMIC PROJECTS
Experimental Operating System and Virtual Machine (July 2012 – May 2013)

- **Environment** C
- **Tools** Lex, Yacc

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 xosnitc.github.io. 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.

Complier (July 2011 – November 2011)

- **Environment** C
- **Tools** Lex, Yacc

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.

Bulls N Bears (September 2011 – October 2011)

- **Environment** HTML, PHP, CSS, MySQL
- **Tools** Adobe Photoshop

This project delivered the website http://bullsnbears.tathva.org/. It was a stock market simulation game as part of Tathva 11. 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.

M.TECH THESIS
- Working on Isolation Problem in Graphs under the guidance of Prof Raghunath Tewari.
- 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

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