

Vishal Chand

vishal02041992@gmail.com

EDUCATION

IIT ROORKEE

INTEGRATED DUAL DEGREE (B.TECH + M.TECH)

Computer Science & Engineering
2010 - 2015 | Roorkee, India
Cum. GPA: 8.677 / 10.0

LINKS

Personal:// vishalchand.com
Github:// [vish-chan](https://github.com/vish-chan)
LinkedIn:// [vishal-chand](https://www.linkedin.com/in/vishal-chand)

COURSEWORK

GRADUATE

Adv. Algorithms • Adv. OS
Adv. Comp. Arch. • Adv. DBMS

UNDERGRADUATE

• Algorithms & Data Structures
• OS • Compilers
• Discrete Mathematics
• Computer Networks

INDEPENDENT

• Advanced Algorithms (Coursera)
• Machine Learning by Andrew Ng (Coursera)
• Applied ML in Python (Coursera)
• Deep learning Specialisation by Andrew Ng (Coursera)

SKILLS

PROGRAMMING LANGUAGES

Over 5000 lines:

Java • C++ • Python • Android • React • JavaScript

Over 1000 lines:

C • C# • Perl • CSS • R • SQL

AREAS OF INTEREST

• Memory Management and Garbage Collection • Runtime • System Architecture and Performance • Game Development • Machine Learning and AI

INTERNSHIPS

- Qualcomm, Linux Perf - 2014
- Qualcomm, Linux Audio - 2013
- IronCode, Directx - 2012

EXPERIENCE

AMD | SENIOR SOFTWARE SYSTEM DESIGNER

Java Performance | 2020 - Current | Bengaluru, India

<https://www.overleaf.com/project/595a5523704e16843388b402>

- Optimising key Java workloads on AMD EPYC servers by investigating and identifying performance opportunities in OpenJDK Hotspot VM.
- Performance modelling and optimisation of key Java server workloads like SPECjbb, SPECPower, SPEC SERT, CNIS BenchSEE, Renaissance, among many others.
- Performance benchmarking and profiling using tools like JMH, Visual VM, perf, and AMD uProf.
- Developed a deep understanding of memory management and garbage collectors in OpenJDK Java.
- **Notable Projects:**
 - Optimised performance of SPECjbb2015 with Java's G1 Garbage Collector. Notable contribution - Configurable card size feature in OpenJDK-18 (JDK-8272773).
 - Contributed to Amazon Corretto's HeapOtheSys benchmark.
 - Designed and implemented AutoTuner, an intelligent benchmark tuning framework for tuning flag based benchmarks. Improved the accuracy and efficiency of benchmark tuning process.

EXPERITEST | SOFTWARE ENGINEER

Seetest Android | 2018 - 2019 | Delhi, India

- Worked with the Seetest manual team for maintenance of existing features and development of new features.
- Executed POCs, and competitive analysis for the new prospects of the Seetest cloud.

QUALCOMM | ENGINEER

Linux Performance | 2015 - 2017 | Hyderabad, India

- Investigated the software architecture by analysing important performance use-cases to find novel performance optimisation solutions.
- Performed UI and boot time performance analysis on Qualcomm's Snapdragon and competitors' chipsets.
- Developed a thorough understanding of Android rendering pipeline and UI performance analysis tools like Systrace and Hierarchy Viewer.
- Executed software performance tasks on Qualcomm's Wearable SOC product line.
- **Notable Projects :**
 - Developed Suspend to Disk feature on Qualcomm Wearable SOC.
 - Designed and implemented an ML based CPU Workload Classifier using **scikit-learn Python**
 - Developed Boot Analyser using **Python**, for USE analysis of Android bootup process.

ACHIEVEMENTS

2022 **Recipient**, DSG Award of Excellence, AMD
2021 **Recipient**, Spotlight, AMD
2013,17 **Recipient**, Qualstar, Qualcomm
2014 **Winner**, IdeaQuest, Qualcomm