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**
LinkedIn:// **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
- 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 Classier 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