

Jai Luthra

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EDUCATION

JULY 2019	IIIT-Delhi
Graduating DECEMBER 2019	8 th Semester, B.Tech - Computer Science and Engineering
APRIL 2015	Bal Bharati Public School, Pitampura, New Delhi
	All-India Senior Secondary Certificate Examination (CBSE), Class XII

EXPERIENCE

MAY - AUGUST 2019	VideoLAN - Google Summer of Code <i>Contributor</i> (Project Page) <ul style="list-style-type: none">• Add support for NVDec, NVIDIA's hardware acceleration video decoding API. (H26x, VPx)• Ongoing project: GitLab Repo Mentors: Steve Lhomme, Thomas Guillem
MAY - JULY 2018	Amazon Development Center, Bengaluru <i>Software Development Engineer - Intern</i> <ul style="list-style-type: none">• Worked with the Automated Advertising team.• Created a Spring web app for AWS Simple Workflow Service (SWF) monitoring API.
MAY - AUGUST 2016	FFmpeg - Google Summer of Code <i>Maintainer</i> (Project Page) <ul style="list-style-type: none">• Wrote an encoder for Dolby TrueHD, a lossless audio compression codec.• Updated and merged the MLP (Meridian Lossless Packing) encoder, originally written by Ramiro Polla in 2009. Mentor: Rostislav Pehlivanov (atomnuker)

SKILLS

SOFTWARE: C, C++, Python, Java, Git, Linux, FFmpeg, CUDA, OpenGL
PLATFORMS: Arduino/AVR, x86 asm, ARM asm
HARDWARE: Embedded C, Verilog

PROJECTS

2019	foveated raytracer	Foveated ray tracer in C++ for eye-tracking VR headsets.
2017	ans	Hacking around Asymmetric Numeral Systems (ANS) entropy coding in C
2017	kaldi-asr	A wrapper around Kaldi, for easy speech recognition and alignment.
2016	armsimc & armcpu	An ARM simulator in C, and a baby ARM CPU in Verilog.
2016	Mapbots	Mapping rooms using a ring of ultrasonic sensors mounted on an autonomous bot
2016	Kompres	Text compression tool written in C, based on Huffman Coding.

ACHIEVEMENTS

AUGUST 2014	Procon Junior (IIIT-Delhi) <i>Rank 4</i> <ul style="list-style-type: none">• A competitive programming contest for highschool students in India.
DECEMBER 2012, 2013	Google Code-In - KDE, NetBSD <i>Completed 6 challenges</i> <ul style="list-style-type: none">• KDE - Bug fixes for Trojita, KStars and Amarok.• NetBSD - Documentation on how-to dual boot with NetBSD.

AREAS OF INTEREST

Multimedia Codecs	Computer Graphics	Virtual Reality	Information Theory	Digital Signal Processing
Linear Algebra	Operating Systems	Algorithm Design	Computer Architecture	Quantum Computing