# Aman Priyadarshi

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# **EDUCATION**

# **NSIT, UNIVERSITY OF DELHI**

B.E. IN COMPUTER SCIENCE 2014 - 2018 | Delhi, India

#### **RPVV, SHALIMAR BAGH**

2008 - 2014 | Delhi, India CBSE XII-PCM: 92% CBSE X (CGPA): 9.2 (out of 10)

#### LINKS

Github:// amaneureka LinkedIn:// amaneureka Twitter:// amaneureka StackOverflow:// amaneureka

#### SKILLS

Python • C# • C/C++ • x86-Assembly • PHP • HTML • CSS

Data Structures • Operating Systems • NT Drivers • Web Application Security • Reverse Engg.

Git • SVN • TFS

# **PUBLICATIONS**

# **IEEE SSCI - 2018**

Synthesis of Neural Networks using Entangled Neurons

# **ADDITIONALS**

#### **STYLUS**

An offline handwriting recognition pen like hardware and tensorflow based model that will type what you write. It supports English alphabets and numbers.

#### **IIRAT**

A Windows service that runs in the background and let you remotely control your device. Message passing and authentication are done through sockets.

# **EVENTICO**

An online event management platform that will let you add/search/review events.

#### **SOCIFTIES**

2016 - Developer at Open Development Initiative - NSIT

2015 - Joint Secretary at IEEE NSIT

2015 - Web Developer at nsit.ac.in

2014 - Web Developer at CollegeSpace

# **EXPERIENCE**

# **SMART IOPS** | Member of Technical Staff

July 2018 - Current | Bangalore, India

- Designed LLVM Compiler Backend for in-house developed micro-controller.
- Optimized and ported assembly firmware to C code using LLVM compiler. This enabled more flexibility in firmware changes and reduced debugging time.
- Defined LDPC architecture & optimized algorithms to generate optimal H-matrix for high-rate, high-girth hard decision decoding. This enabled us to correct more than 40 errors per frame.

# HACKERRANK | SOFTWARE ENGINEERING INTERN

May 2017 - Jun 2017 | Bangalore, India

- Implemented testcase parallelization infrastructure. Became familiar with Lambda functions and used that in parallelization infrastructure. This helped in reducing turnaround time for the submission by faster processing.
- Improved CodeChecker response time by optimizing internal modules and re-designing Java tokenizer.

# Dec 2015 - Jan 2016 | Bangalore, India

- Reported & fixed vulnerability that could have been exploited to gain access over HackerRank testcases during the running contests.
- Created unit testing framework to test several security related issues in codechecker.
- Integrated Aws C++ SDK in the CodeChecker which ultimately reduce the fetch time from 1.16s to 0.52s.

# GOOGLE SUMMER OF CODE '16 | KERNEL DRIVER DEVELOPER, REACTOS

May 2016 - Dec 2016

- Developed SATA-AHCI Driver for windows server 2003 targeting NT 5.2/6 windows storage stack model.
- Enabled win 2k3 bootability on newer SATA devices without IDE emulation.
- This new driver will make ReactOS compatible on newer SATA devices and support advanced features like NCQ and fast data transfer with a maximum speed of upto 6 Gbps compared to current speed of 1 Gbps.

# **OPEN SOURCE**

#### **ATOM OS** I Real Operating System in C# from scratch.

June 2014 – Present

Atom OS is a managed x86 monolithic kernel based OS developed in C# from scratch. Compiled using self-designed MSIL backend compiler. I also developed kernel device drivers such as IDE, PS2, and SVGA.

# T-REX DINOSAUR | REINFORCEMENT LEARNING BASED ALGORITHM.

Apr 2016 - May 2016

A T-Rex Chrome game simulation in JavaScript that uses Reinforcement learning-based algorithm to play game all by itself.

# HONORS & AWARDS

- 2017 Secured #325 (world) in the Snack Down Pre-Elimination Round
- 2016 Selected for Indian Programming Camp CodeChef
- 2016 Google Summer of Code 2016
- 2015 HackerRank and CodeChef Vulnerability Report
- 2014 Vulnerability Reported, 123contactform.com Hall of Fame