Pratik Rajesh Sampat
Software Engineer, IBM

Contact

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Education

2015 - Bachelor of Technology
2019   Computer Science
       PES University, India
       CGPA: 8.87/10

2015 - Class 12
       The Oxford Senior
       Secondary School, India
       Aggregate: 89%

2013 - Class 10
       The Oxford Senior
       Secondary School, India
       CGPA 9.0/10

Skills

- Linux Operating System
- Embedded Systems
- Mixed reality

Programming Languages

- C / C++
- Python
- Bash Scripting

Experience

Aug 2019 - IBM, Linux Technology Center
Aug 2022   Software Engineer

- Enabling and enhancing energy management for the IBM POWER platform on Linux

- Proposed a weighted probability approach for CPU-idle state selection.
  Presented in the OS-Directed Power-Management Summit, (OSPM) Italy - May 2020; proposal covered in the Linux Weekly News

- Proposed a CPU namespace to virtualize topology information for containerized applications.
  Presented in the Linux Conference Australia (LCA) - January 2022; proposal covered in a phoronix article

Jan 2019 - IBM, Linux Technology Center
Jun 2019   Software Engineering Intern

- Enabling the IBM POWER architecture on the gem5 open-source simulator and booting a full system multi-threaded Linux kernel

Jun 2018 - Carnegie Mellon University
Jul 2018   Summer Undergraduate Intern

- Profile the Linux Operating System to extract the kernel view of memory and analyze access patterns

- Simulated a memory prefetching algorithm based on N-grams and evaluated its performance with the state of art in a simulated environment

Jun 2017 - Scapic
Jul 2017   Software Engineering Intern

- Assisted in building an in-browser, marker based augmented reality feature for user to create no-code mixed reality experiences

Jun 2016 - Microsoft Innovation Labs
Jul 2016   Intern - PES University

- Prototyped a Virtual reality sandbox experience and created an interface using 3D depth processing of the Microsoft Kinect Camera

Awards

Dec 2021 - Linux & Power
Significant Contributor
Open Source
Recognition
Program, IBM

Sep 2021 - Exemplary Rookie,
General Manager
awards, IBM

Jan 2020 - First - India Systems
Development Labs
Hackathon, IBM

Feb 2019 - Prof. CNR Rao
Merit Scholarship,
PES University

Nov 2017 - Third - Microsoft
HashCode 2k17
Hackathon

Jun 2017 - Second - Honeywell
Power of connected
Hackathon

Nov 2016 - Second - Microsoft
Hashcode 2k16
Hackathon

Aug 2016 - Third - Pluralsight
Smarter Than
Yesterday
Hackathon

Publication

Mar 2018 - **IEEE - Recent Advances in
Information Technology (RAIT),
Indian Institute of Technology, Dhanbad, India**

- Face recognition using interest points and ensemble of classifiers

Projects

Jan 2016 - **Haptic Feedback glove**
Sep 2018   Indian patent pending: 201841036867

- A force feedback haptic glove designed to provide realistic sensations of the shape and the stiffness of objects in the virtual space

- An algorithm also devised to convert any three-dimensional model, to a haptic space matrix such that each surface is mapped to a force-feedback sensation on the glove

Nov 2018 - **Augmented Reality Spectacles**

- A smart-glasses project that re-imagined augmented reality through sound via bone conduction rather than a head-mounted display

- The regular pair of spectacles were retrofitted with an AVR-Arduino microcontroller, a pair of bone conduction speakers, a bluetooth module for communication, and, a capacitive touch interface was designed for the frames