

Rajdeep

Bandopadhyay

FIRMWARE ENGINEER

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AVAILABILITY

Available for co-op on
alternating semesters from
Summer 2020, references
available upon request.

Summary

Aspiring AI / ML Engineer
and an Incoming Co-Op
Firmware Engineer at Infinera
located in the heart of
Silicon Valley.

Looking for vertical career
opportunities starting Summer
2020 and beyond.

With a distinction diploma in
Fine-arts and painting, I bring
creative solutions and new
perspective to any problem.

SKILLS:

- **Languages:** C++, Java, Python, MATLAB, Visual Basic Script, SQL, HTML, Rust
- **Tools:** TensorFlow (ANN, CNN, RNN, LSTM), Scikit-learn, Git, GitHub, Jupyter Notebook
- **Industry Knowledge:** Cryptography, Penetration Testing, Machine Learning, Deep Learning
[Natural Language Processing, Computer Vision]
- **Operating Systems:** Mac OS X, Raspbian OS, Windows, Linux, Unix
- **Soft Skills:** Communication, Pro-actively manage multiple projects at once, Self-starter,
Team Oriented, Critical Thinking, Problem Solving, Self-motivation
- **Other Skills:** Fine arts and Painting, Photoshop, Keen eye for aesthetics

EMPLOYMENT HISTORY

- **Infinera** Sunnyvale, CA
Firmware Engineer Co-Op Aug - Dec 2019
 - Developing a Network Management Application using netopeer2/NETCONF protocols and YANG Data Modeling for Efficiency tests of certain Config files.
 - Developing tools for the Firmware team, and supporting ASIC Engineering team to develop required tools for analytics and working with Embedded Systems.
- **University of Cincinnati** Cincinnati, OH, USA
Research Assistant Oct 2018 - Aug 2019
 - Implemented RSBAC, a subset of RBAC Model, in order to map permissions for users within the framework. Investigating and analyzing multiple threat scenarios, cyber and physical, on Things Gateway to develop a more secure, reliable, and open-source "Things Framework" using IoT devices under a single "gateway".
 - Analyzed a more secure and reliable emergency-response system to be integrated with the Mozilla-IoT gateway. Defined architecture for the development of the auxiliary android application called "ThingZone".
 - Set up the permission controls
 - Worked on the backend
 - Mitigated 5 high-risk cyberthreat scenarios
 - Integrated Nagios Network Analyzer with Mozilla Gateway

This research project is funded by Mozilla and NSF (National Science Foundation)-USA
- **National Metallurgical Laboratory** Jamshedpur, IN
Summer Intern, and Practical Learner Participant Jun - Aug 2016
 - Worked closely with the head technical officer, Mr. Chatteraj. Gained knowledge about the working process and procedure of benefaction of certain metals from its ore.
 - Showcased the potential of a Multi-Gravity Separator (MSG), in the gravity filtration process of an Iron ore sample.

EDUCATION

- **University of Cincinnati, CEAS** Aug 2018 - May 2023
Bachelor of Science in Computer Science + M.S. (ACCEND)
- **St. Mary's English High School, Engineering Science** Mar 2016 - Feb 2018
Computer Science and Information Systems

EXTRA- CURRICULAR AND VOLUNTEER ACTIVITIES

- ACM-W: Support female classmates to empower and help all students succeed in Computer Science. Attend Bi-weekly meetings which includes technical workshops. Mar 2019 - Present
- Greater Hope: Mathematics Tutor for 8th and 9th grade students struggling with their grades in middle and high school. Feb 2019 - Present
- Artist: Canvas paintings, Fine-arts and scenery style Acrylic Paintings as a pastime hobby. Jan 2005 - Present
- Animal Rights Activist: Plan-India volunteer and animal rescuer. May 2015 - Jul 2015

LANGUAGES

English, Bengali, Hindi, Sanskrit, Punjabi

AWARDS

- Global Scholarship | University of Cincinnati
- Distinction Diploma Certificate | Bangla-Parasad Institute of Fine Art and Painting
- Geetanjali Associations | Fine Arts and Paintings | Ranked in Top 5 in the Jharkhand, IND
- Thomas Paul's Science Quiz | State Recognized
- Silver Medal | National Merit Search Examination | Ranked in the 95th percentile nationally