Subhdeep Saha

Fourth Year Undergraduate
Department of Computer Science and Engineering
Indian Institute of Technology, Kanpur

subhdeepsaha@gmail.com
subhdeep
+91-7054133101
subhdeep.org

Educational Qualifications

Year	Degree	Institution(Board)	CGPA/%
2015 – 2019 (Expected)	B.Tech, CSE	Indian Institute of Technology, Kanpur	6.13/10.0
2015	AISSCE – XII	Sudhir Memorial Institute, Kolkata (CBSE)	88.4%
2013	AISSE – X	DAV Model School, Kharagpur (CBSE)	10.0/10.0

Scholastic Achievements

- AIR 5205 in **JEE Advanced 2015**
- Ranked in top 1 percentile in **JEE Main 2015**, among 14 lakh appearing candidates

Projects

Dashboard Web Extension/App *IIT Kanpur*
Inter IIT Tech Meet February, 2017

- Involved in creating a web extension which acted as a user's home page
- Server Side was implemented as multiple **microservices** in various languages (Golang, Python, NodeJS) involving inter-process communication via JSON RPC
- Client side was implemented using Angular
- Fully **Dockerized scalable backend** running on a docker-compose setup
- Judged **1st** among participating IITs
- **Github**: yashsriv/beethoven

Smart Mirror *IIT Kanpur*
Programming Club, IITK Summer 2016

- Built an IoT Mirror with a RPi and a display fitted with a 75% reflecting mirror
- The mirror had features such as weather forecast, calendar notifications and pushbullet notifications of a user (determined via face identification)
- Received Best Applicable Project
- **Github**: 11000011/Smart-Mirror

Reversi Game in Python *IIT Kanpur*
Association of Computing Activities, IITK Feb 2016- April 2016

- Developed a python application using Pygame for 2 Players as well as Single Player Reversi
- Uses the negamax algorithm with an efficient heuristic check for better performance against humans
- **Github**: yashsriv/Reversi-Python

Branch Predictor *IIT Kanpur*
Course Project, Computer Architecture 6th Semester

- Implemented a branch predictor for intra class championship in a team of 2
- Was judged the best in class
- **Github**: yashsriv/branch-predictor

Reversi *IIT Kanpur*
Course Project, Functional Programming 6th Semester

- Implemented AI & text-based implementation of the game Reversi in Haskell
- **Github**: prathamv28/Reversi-hs

Tango *IIT Kanpur*
Course Project, Compiler Design 6th Semester

- Base Language: Go, Target Language: x86 Assembly, Compiler Language: Go
- **Github**: yashsriv/tango

Work Experience

Samsung Research Institute *Delhi, India*
Research Intern Summer 2018

- Research work on device positioning estimation using **BLE** (Bluetooth Low Energy) signals
- Helped in setting up the API calls for signal broadcasting in speakers which support BLE
- Carried out experiment to determine the stability of the **RSSI** (Received Signal Strength Indication)
- Wrote utility python scripts

New York Office, IIT Kanpur *Kanpur, India*
Frontend Developer, under Prof. Manindra Agarwal Summer 2017

- Worked on a scalable information management and retrieval system for New York office of IITK
- Led a team of 4 members and was a peer mentor during the course of the internship
- Implemented linking of user's Facebook account
- Ported components of Angular to the Redux model
- Integrated Prose Mirror in the existing Web-App

Whitelogic *Chennai, India*
Frontend Developer Winter 2016

- Client Technologies Developer in a startup organization
- Built a web application from scratch using Angular 2 as the framework. Worked with a REST-api along with Typescript to develop the app
- The MVC Design Pattern was followed to create scalable code. The application has been deployed in a few major Fortune 500 companies

Skills

Programming:
Proficient: Python, C++, Javascript, Typescript
Experienced: C, Shell
Exposure: Java, Haskell
Web: Express with Typescript, Flask with Python TypeScript, Angular, Reactive Programming
Utilities: Linux Shell Utilities, NgRx, GDB, Git, Docker, MongoDB, LaTeX, Vim, Numpy

Relevant Courses

CS: Fundamentals of Computing, Computer Organization, Data Structures and Algorithms, Computing Laboratories - 1&2, Operating Systems, Computer Systems Security, Compiler Design, Computer Architecture, Computer Networks
Math: Discrete Math, Probability and Statistics

Miscellaneous

- Among the top 15 teams of India in CSAW 2016
- Exploited and secured the zoobar server as part of Computer Systems Security Course
- Open Source Contribution in **Mozilla Firefox**
- Mentored 6 students in making a Angular app where campus community can share their academic resources
- Built a Google Chrome Extension for Techkriti'17