

SIR Residency Program 2018

The Sikka Ipiktok (SIR) Residency Program is a first of its kind three-month research training program with the Sikka AI Lab (SAIL), that is basically designed in order to provide you with hands-on research experience related to deep learning in healthcare. An experience that is designed to prepare you for graduate programs in artificial intelligence, the uses of data to make decisions, machine learning and healthcare. You may be motivated to start a company after this or pursue more research.

The SIR program is modeled after a mentor / student pairing model. You will be paired with a SAIL engineer who will guide you. You are supposed to pick from large dataset available and pick a research problem of mutual interest and then use machine learning techniques to solve it. You can of course strike partnerships and friendships beyond the assigned mentor.

You are encouraged to submit the papers to top venues such as JMLR, ICML, and NIPS. We will be happy to provide you with examples of research performed in SAIL.

Since it is a full-time program it cannot be undertaken along with university study or a full-time job.

Applications are encouraged from people who have a strong technical background and are deeply passionate about research in AI. Any Prior experience in machine learning will certainly act as a strength but alongside people from a diverse range of backgrounds, that include

areas that are unrelated but not limited to machine learning such as math, physics, bioinformatics, finance, economics, linguistics, and computational social science are also looked forward to.

The research residents who will be accepted will be based in Sikka HQ in San Jose, California. We also have two SAIL centers in India where the researchers can be based. One is in Ahmednagar and another one in Baroda.

Responsibilities of The Resident

- Learn how to perform research in deep learning
- Understand prior work and existing SAIL literature as well
- Work with mentors in order to identify problems of similar interest and develop AI techniques that are novel.
- Translate ideas into practical code and ONE API
- Write up results of the research in the form of an academic research paper and then further submit it to a top conference in the area.

Eligibility Requirements

- Bachelor's degree in a STEM field such as Mathematics, Statistics, Physics, Cognitive Science, Electrical Engineering, Computer Science, or equivalent practical experience. (an undergrad GPA around 3.9 / 4.0, or 9.6 / 10.0, or 92 / 100)

- A fully Completed coursework in: Linear and multilinear Algebra, Probability, matrix and tensor calculus, or anything equivalent – in particular, proficiency in classification and linear/non-linear regression, boosting, support vector machines, hidden Markov models, and Bayesian networks
- Experience in Coding in java, a general-purpose programming language, such as C/C++/C# python, R, matlab, scipy/numpy, tensorflow, lamda
- Familiarity with any deep learning platforms such as PyTorch, Caffe, Theano, MXNet or TensorFlow, Keras
- The Ability to communicate complex research in a precise, clear, as well as an actionable manner.

Preferred Qualifications

- Research experience in machine learning or AI.
- Contributions that are significant to open-source projects, demonstration of strong math, statistics and probabilities, or machine learning skills.
- A strong record of scholastic excellence.

Application Requirements

- In order to apply to the Sikka Ipiktok Residency Program 2018, one will need to complete the application procedure and submit the following items:

- Resume including links to GitHub, personal website and portfolio, kaggle and whatever is applicable.
- Personal statements
- Transcript of Academic grades

List of Important Dates

- Deadline for applications: January 31, 2018
- Notification of interview: February 15, 2018
- Notification of admission: March 15, 2018
- Residency Program start: May or June 2018
- Residency Program end: August or September 2018