Eklavya Sharma

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Education

BITS Pilani
BE in Computer Science
August 2014 - June 2018
Pilani, Rajasthan, India
GPA: 9.14 / 10

Amity Saket
CBSE Science
April 2011 - May 2013
New Delhi, India
Score: 91.6 %

Research Interests

Algorithms, Complexity, Cryptography, Game Theory, Graph Theory

Links

Github:// sharmaeklavya2
LinkedIn:// sharmaeklavya2
Codeforces:// eku
ICPCID:// 5CN1FMJ0JIDP

Selected Coursework

BITS Pilani
Advanced Algorithms and Complexity
Discrete Structures in Computer Science
Design and Analysis of Algorithms
Cryptography
Graphs and Networks
Theory of Computation
Data Structures and Algorithms
Logic in Computer Science
Machine Learning
Artificial Intelligence
Computer Networks
and many more (see transcript)

Skills

Programming Languages
C/C++, Python, Java, Bash, JavaScript, Haskell, Prolog
Software Libraries
NumPy, Pandas, Scikit-Learn, TensorFlow, Django
Other Languages
SQL, LaTeX, HTML, CSS

Experience

media.net | Platform Engineer
August 2018 - Current | Bangalore, India
- media.net participates in auctions to purchase ad-spots. I'm doing research on estimating ad-spot valuation and choosing the optimal bid amount.

American Express | Intern
Jan 2018 - June 2018 | Gurgaon, India
- Trained a neural network to estimate the probability of a credit-card applicant defaulting. A custom architecture was used because data was semi-structured.

Directi | Intern
May 2017 - July 2017 | Mumbai, India
- Made Directi's news article classification algorithm recognize more categories.

Zulip | Google Summer of Code student
May 2016 - Aug 2016

Projects

Analysis of Primality-testing Algorithms Oct 2017 – Nov 2017
'Advanced Algorithms and Complexity' course project
- Studied the AKS primality-test and attempted to improve it.
- Compared compositeness-proving algorithms.

Mitigating DNS-related DoS attacks using SDN Sept 2017 – Dec 2017
- Devised a mitigation mechanism for DNS amplification attacks which uses a set of geographically-distributed SDN routers.
- Will present a paper on it in Sept 2018 at ICCACI.

CT-means clustering algorithm Sept 2017 – Dec 2017
- Invented a fast approximation algorithm for C-means clustering.
- Mathematically proved its convergence and approximation guarantee.
- Implemented and benchmarked the algorithm. It wasn't fast enough in practice.

Achievements

ACM-ICPC on-site regionals
~3000 teams participate in ACM-ICPC India online qualifying round annually. Top few teams qualify for on-site contests. My team ranked 29/250 in 2017, 66/450 in 2016, 88/250 in 2015 in Amritapuri and 30/70 in Kharagpur 2016.

BITS-Pilani Merit Scholarship for top 2% CGPA in 3 semesters

GATE CS: All-India rank 86 / ~100k March 2018

Societies

BITS-ACM BITS-Pilani ACM student chapter
- Problem setter for 3 programming contests organized by BITS-ACM.
- Created backends for web applications used in online quizzing events.
- Conducted intra-BITS-ACM workshops on Linux and CLI.