Chintak **Sheth**

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Objective

Seeking a full time software engineering role, preferably involving machine learning, starting Jan 2018. Leverage strong algorithms and math fundamentals to solve real world problems by building intelligent, large scale applications.

Education

State University of New York - Stony Brook, USA | M.S. in Computer Science *Aug. 2016 - Exp. Dec. 2017*

- GPA: 3.92/4.0
- Concentration: Software Engineering for Machine (Deep) Learning applications
- Courses: Analysis of Algorithms (548), Parallel Programming (613), Machine Learning (513), Prob & Stats (544), Computer Vision (527), Computational Geometry (555), Artificial Intelligence (537), Compiler Design (504)

BITS - Pilani University, India | B.E. (Hons.) Electrical and Electronics Engineering *Aug. 2010 - Jul. 2014*

- GPA: 7.94/10.0
- Thesis title: Image Segmentation and Object Saliency
- Thesis Advisor: Prof. Venkatesh Babu, **Indian Institute of Sciences, Bangalore**

Skills

Programming	4+ years: C/C++, Python, MATLAB; 2 years: Cython, PHP, Javascript
Scientific Software	2+ years: Tensorflow, Caffe, Keras, Scikit-learn; 4 years: NumPy, SciPy, Pandas, OpenCV; 1 year: Theano, Scikit-learn.
Technologies	2+ years: MySQL, Redis, AWS (EC2, S3, SQS); 1 year: Docker, jQuery, Flex, Bison.

Work Experience

Arya.ai, Mumbai, India | Machine Learning Engineer *Nov. 2015 - Jul. 2016*

- Developed key solutions for two of our clients: document parser - **Société Générale** (French bank) and cheque processing - **Axis Bank** (Indian).
- Helped improve cheque clearing efficiency of Axis Bank by 35% by automatically detecting account numbers, cheque amount and verifying signatures.
- Used C++ for weightlifting heavy computational workload and Python for providing an easily integrable interface.
- Led the development of our deep learning library in TensorFlow and efficient data preprocessing in C++. `http://arya.ai/`

LensBricks Inc., Bangalore, India | Software Engineer *Jul. 2014 - Oct. 2015*

- Spearheaded the machine learning effort for curating interesting moments between parents and children in a home.
- Participated in Highway1, PCH Intl.'s hardware accelerator in SF; took charge of the entire dev process - conducting pilot studies and algorithm dev.
- In-charge of the bi-weekly sprint cycles; co-ordinated efforts among the software team, product/hardware team and the UI/UX team.
- Aquired by Flextronics in 2016; primarily for the algorithms developed for household interaction analysis.

Projects

- **E-- compiler - CSE 504 (Compiler Design)** | Course Project *Fall 2016*
  Built a compiler for a non-OO language using Flex, Bison and C++. Developed all phases - (individually) lexical analyser, parsing, abstract syntax tree construction, type checking; (in a group of 3) memory allocation and intermediate code generation.
- **Image Captioning - CSE 527 (Computer Vision)** | Course Project *Fall 2016*
  Coupled CNN and LSTM to create an end-to-end image caption generator. `https://github.com/chintak/image-captioning`
- **Policy Gradients for playing Pong - CSE 537 (Artificial Intelligence)** | Course Project *Fall 2016*
  Applied Policy Gradients method in Reinforcement Learning to play ATARI's Pong game.
- **Super Pixel Clustering via Kernel Density Estimation**, IISc, Bangalore | Research Project *Jan. - May 2014*
  Formulated a better technique based on kernel density estimation for image segmentation via super pixel clustering. Establishes a tighter bound on the color variance in the output segment. Published in ACM ICVGIP 2014. `http://doi.acm.org/10.1145/2683483.2683557`
- **Object Saliency using a Background Prior**, IISc, Bangalore | Research Project *Jan. - May 2014*
  Authored an algorithm for assigning uniform object-wide saliency values instead of assigning saliency proportional to the contrast, as prevalent in the literature. Published in ICASSP 2016. `http://dx.doi.org/10.1109/ICASSP.2016.7472013`

Extracurricular Activities

Centre for Technical Education, BITS Pilani | Co-founder & Student Co-ordinator *Nov. 2012 - Jun. 2013*

- Spearheaded the initiative to conduct various beyond-the-scope courses on various application areas - computer vision, C# - for a nominal fee.
- Negotiated terms with our campus Director and Head of CS Dept., and recruited students for teaching and co-managing the initiative.
- Generated ₹120k in revenue. Organized various hackathons and funded several student technical projects on campus.

QUARK - National Technical Festival, BITS - Pilani | Robotics Panel Co-ordinator *Dec. 2012 - Feb. 2013*

- Conceptualized, budgeted and organized 4 robotics challenges by successfully leading a team of 18 people. Total of 92 teams participated from 35 colleges across the country.