

Xi He

837 Cedar Hill Drive – Allentown – Pennsylvania

☎ +1 (484) 633 8040 • ✉ xih314@lehigh.edu • 🌐 <https://xihey.com>

Company Recruitment team

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Siemens Corporate Research.
720 College Rd. E
Princeton

Dear Dr. Akrotirianakis

I am writing to express my interest in the Predictive Analytics and Monitoring internship at the Siemens Corporate Research during this summer. I'm currently a second year Ph.D. students in Industrial and System Engineering from Lehigh University, and I obtained my MS/BS degree both major in Mathematics before. I am confident that my strong mathematic background and two years optimization research experience would allow me to contribute your productive group.

Previously, I have had the opportunity to work on several relevant projects that would provide me with the skill sets I need to be an qualified researcher. These projects have included: explored negative curvature of deep learning network to boost its performance, specifically, by fully utilizing negative curvature information, our method can be able to find local optimal instead of sticking at saddle point which may have weaker performance; developed a well-optimized C++ software package for image recovery by using widely used method FISTA. With the well-optimized implementation, we can recovery noised image much efficiently; and I also implemented Matlab software package to compare various of technologies on recognizing handwriting digits, such as SVM, kNN, decision tree, neural network, etc. Throughout all these projects, I gained fruitful achievements on developing new algorithms, technique skills on analyzing performance of those algorithms (in terms of complexity and convergence rate) and practical experience on implementing algorithms by multiple programming language efficiently, which is exactly consistent with your ability requirement description of the intern.

I would be excited to join the Predictive Analytics and Monitoring group. The group has exceptional appeal for me because of the relevant research topics (e.g. optimization, machine learning) and opportunities (e.g., real-world industrial challenge). I believe that I'm the ideal candidate of this summer intern based on my experience.

I look forward to the opportunity to speak with you and discuss the position in more detail. Thank you in advance for your time and consideration.

Yours faithfully,

Xi He

Attached: curriculum vitae