

# Xiaodong Zhang

Seeking SWE Full-time Job  
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Providence, RI

## EDUCATION

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- **Brown University** Providence, RI  
*M.S. in Computer Science GPA 4.0* Anticipated Graduation: May. 2020
- **Harbin Institute of Technology** Harbin, China  
*M.S. in Computer Science* Sept. 2012 - July. 2014
- **Harbin Institute of Technology** Harbin, China  
*B.S. in Computer Science* Aug. 2008 - July. 2012

## WORKING EXPERIENCE

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- **Facebook (C++/Python)** Seattle, WA  
*Software Engineer Intern, Stream Processing Team* May. 2019 - Aug. 2019
  - **Synthetic Data Generation:** Built a synthetic data generation tool in C++ which is capable of producing complex data for 9 different types at **high throughput**(up to 200MB/s) that can form the input to streaming pipelines.
  - **Performance Testing:** Extended the testing framework to enable **performance measurement** and **regression detection** for stream processing pipelines. Synthetic data generator is used to feed high throughput input to streaming pipelines undergoing testing.
- **Center for Computation & Visualization** Brown University  
*On campus Intern, Linux Cluster Support* Sep. 2018 - Nov. 2018
  - **Cluster Performance Measurement:** Tested various code types and architectures on CentOS Sandy/Ivy computing nodes. Compared performance of programs running on RedHat7 Sandy/Ivy computing nodes.
  - **Linux Support:** Handled IT tickets related to Linux Clusters.
- **Shanghai Pudong Development Bank (C#)** Shanghai, China  
*Software Engineer/Project Manager* Aug. 2014 - Aug. 2018
  - **Domestic Teller System:** **1/** Implemented new features to check permissions and force tellers to do reconciliation. **2/** Upgraded reconciliation system by doing **automatic account checking**, which reduced at least one hour for every teller in reconciliation everyday.
  - **Branch Teller Applications:** **1/** Designed a framework to handle message passing, teller devices and authorizations for branch applications; **2/** Developed a tool to translate terminal-based applications to GUI applications in **WPF**, and automated deployment for testing by creating a website in **Django**; **3/** Led 39 branches migrating 1200+ applications to the new front-end system, **accelerated this task by 40%**, which **saved 3 million RMB** for development.

## PROJECTS

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- **Wennix OS (C)** Feb. 2019 - Apr. 2019  
*Project from CS169 at Brown*
  - Implemented an OS in C which contains **processes** and **threads** management, **drivers** for tty and disk, **virtual file system**, **System V File System** and **virtual memory**; Implemented system calls like *read*, *write*, *fork*, etc. Capable of running binary files in user mode and handling page fault.
- **Poker Game AI Platform: Wild Escape (C++)** Sep. 2015 - Nov. 2015  
*Software Engineer at SPDB*
  - Designed and built a poker game service in C++ which is responsible for validating cards and organizing clients; Implemented template program in client side, which handles messages from/to server, for users to add AI algorithms.

## PUBLICATION

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- Wang H, Zhang X, Li J, et al. Productseeker: entity-based product retrieval for e-commerce[C]//Proceedings of the 36th international **ACM SIGIR** conference on Research and development in information retrieval. ACM, 2013: 1085-1086.

## RELEVANT SKILLS

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- C, Modern C++, Python, Linux, Boost/folly