

Zhuofang Dai

+86 13817148073

dzf353@gmail.com

Skills

Game Dev. **Python, C++, BigWorld, Havok, Unity3D, Lua.**
Java Web Dev. **Java, JavaScript, Spring, RESTful API, HTML, JSON, Jackson, Maven.**
Engineering **SVN, Git, TDD, Agile.**
English **IELTS 6.5, fluent in spoken and written English.**

Work Experience

2014–2017.7 **Senior Game Developer at Netease Games, Inception Group.**
◦ Game Engine: texture process system, animation system and character state machine system.
◦ Game Logic: hero skills framework; fog of war; synchronized online combat framework.
◦ Performance optimization for games in architecture and language(Python/C++) levels.
2013 **Summer Analyst at Morgan Stanley, RATE Group.**
Implemented a web-based server using JAVA Spring and SOAP, which provided services of interest rate derivatives risk calculation used by the team internally.

Community

GitHub **github.com/DrawFun.**
Blog **drawfun.me.**
Linkedin **linkedin.com/in/zhuofang-dai-5b08592b.**

Awards

2016 **Netease Technological Invention Award, The Second Prize.**
2014 **Outstanding Graduates Awards of Fudan University.**
2013 **National Scholarship of Fudan University.**
2012 **NVIDIA CUDA Campus Programming Competition 2012, The First Prize.**
2011 **NVIDIA CUDA Campus Programming Competition 2011, The Second Prize.**
2010 **"Jiangsu Software Cup" National Software Competition, Excellent Prize.**
2009 **The 7th Nanjing University Innovative Software Competition, The Second Prize.**

Education

2011–2014 **MS in System Software, Software School, Fudan University.**
3-year academic research mainly on accelerating concurrency bug detection by GPGPU.
2007–2011 **BS in Software Engineering, Software School, Nanjing University.**

Project Experience

- 2017.7 **XChange**, *Java*, Independent Project, github.com/timmolter/XChange.
XChange is a popular(1.1K stars) library providing a simple and consistent API for interacting with 50+ Bitcoin and other crypto currency exchanges for trading and accessing market data. I helped the project in designing and implementing most accounting and trading functions of jubi.com xchange provider.
- 2014–2017.7 **WildFire**, *Python, C++*, Company Project, wf.163.com/index.html.
WildFire is a 3D action multiplayer online battle arena (MOBA) video game released in 2016. I was responsible for texture processing, physical destruction system and fog of war system. I also focused on performance and memory optimization in architecture and language level.
- 2015–2016 **WildFire Awakening**, *Python, C++*, Company Project.
This project is a 3D action mobile game published in the Apple Store in March 2017. I designed and implemented the hero skills framework, the synchronized online combat framework and the state machine of hero behavior.
- 2011–2014 **Hydra**, *CUDA, C*, Research Project.
Hydra aims at improving concurrency bug detection performance on fused CPU-GPU architectures. By parallelizing the detection algorithm on GPGPU, Hydra achieves a nearly overhead free runtime detection.
This research has been published in ICPP2014.
- 2012 **HTM+**, *CUDA, C*, Independent Project.
HTM+ is a CAPTCHA breaker based on HTM algorithm, a neural network algorithm in pattern recognition. By leveraging GPGPU acceleration, HTM+ improves the original algorithm to a high parallelism level and achieves up to 45x speedup w.r.t the sequential Intel i7 version.
This project won the First Prize in NVIDIA CUDA Competition 2012.
- 2011 **Delta-Stepping+**, *CUDA, C*, Independent Project.
Delta-Stepping+ is the CUDA version of Delta-Stepping algorithm, which is a state-of-art algorithm in the SSSP(Single Source Shortest Path) area. It achieves 30x–60x speedup w.r.t the sequential Intel i7 version.
This project won the Second Prize in NVIDIA CUDA Competition 2011.
- 2010 **Vehicle Recognition**, *C++, MFC*, Independent Project.
This system can identify abnormal behavior on the basis of perception of moving targets. I was responsible for the UI implementation based on MFC.
It won the Outstanding Prize in Jiangsu Cup National Software Competition 2010.
- 2009 **Dream Bubble**, *Java ME*, Independent Project.
Dream Bubble is a bomb-man game based on Java ME, Java Wireless Toolkit, supporting man-machine games and multi-players(four at most) online games via bluetooth. I was responsible for the network communication and synchronization via bluetooth.
This project won the Second Prize in Software Design Competition of Nanjing University 2009.

Publications

- 2014 **Zhuofang Dai**, Zheng Zhang, Haojun Wang, Yi Li and Weihua Zhang, *Parallelized Race Detection Based on GPU Architecture*, 2014 Annual Conference of Advanced Computer Architecture(ACA 2014), **Best Paper Award**.
- 2014 **Zhuofang Dai**, Haojun Wang, Weihua Zhang, Haibo Chen and Binyu Zang, *Hydra: Efficient Detection of Multiple Concurrency Bugs on Fused CPU-GPU Architecture*, The 43rd International Conference on Parallel Processing(ICPP 2014)).