

学历背景

California State University, Northridge, Northridge, California, USA

计算机科学硕士 2020 年 6 月毕业 (预计)

Queens University, Kingston, Ontario, Canada

电力工程学学士 2015 年 6 月毕业

编程语言

后端和软件开发: C# (.NET Framework), Java (Apache Tomcat), Python, Node.js, Go.

前端和移动开发: HTML/CSS/JavaScript, Flutter (Dart), Unity (C#), Ionic, Angular.

云计算: AWS, GCP, MySQL.

自动化测试: Selenium, Java Robot.

嵌入式系统: Arduino, C, Assembly, VHDL.

数据科学

编程语言: Octave, MATLAB, Python, Julia

数据科学框架: scikit-learn (auto-sklearn), Keras (AutoKeras), WEKA (Auto-WEKA)

数据科学知识: Probability & Statistics, Machine Learning, Deep Learning

云计算: GCP, AWS (SageMaker, Rekognition)

可视化: Matplotlib, Excel, Tableau

其他技能

语言: 英语 (专家级), 普通话 (母语).

技术杂志撰写: Medium 和 Towards Data Science 将本人文章发布于首页之前不需审核。

工作经验

技术杂志作者

- 在 Towards Data Science, freeCodeCamp.org, Frontend Weekly, Hacker Noon 和 The Startup 担任作者。
- 文章在人工智能和机器学习板块多次刊登首页。
- Pen Test Magazine 的编辑曾请求将本人文章刊登他们官网首页。
- 机器之心曾翻译并转发过本人文章。

研究助理, California State University, Northridge

- 从事研究相关工作例如文献检索 LaTeX 编辑等。
- 对用户行为特征分析领域做过部分研究。
- 协助导师完成大量研发工作, 包括代码编写。
- 首篇论文将发布于 IEEE HSI 2020.

项目经理, California State University, Northridge

- 组织协调会议, 引导其它硕士生和博士生顺利完成他们的研究。
- 协助组员解决研究相关问题, 例如云平台的操作及运维。

助教 National Science Foundation

- 帮助其它学生理解云平台和数据库。
- 帮助其它学生理解数据科学的相关知识及研究流程。

Software Test Engineer, ETAP

- 完成软件测试工作。
- 编写和改进软件测试文档。
- 编写过一个自动化测试工具。

Software Engineer Internship, CETC Motor

- 让一个私有编译器支持浮点运算。
- 对支持文档进行了翻译工作。

Electrical Engineer Internship, State Grid Corporation of China

- 设计并实现了一个 Java 程序用于文件整理。
- 和其他 6 个工程师完成了国家电网自动化的校对工作。



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项目经历

研究相关项目

- 制作过基于 HTML5 Canvas 的小游戏，后端技术为 Node.js 和 Golang。
- 制作过一个社交媒体软件，所用技术为 HTML/CSS/并使用 Selenium 对其进行过测试。

翻译软件

- 利用 Flutter 前端和 Firebase 后端编写，支持 Android 和 iOS。
- 支持超过 20 种语言和聊天室功能。
- 用 Selenium 进行过自动化测试。

网页游戏

- 设计并实现了一些游戏彩蛋，可以在个人主页[\[https://shenhuang.github.io/\]](https://shenhuang.github.io/)上找到。
- 设计了一个基于独角兽表情的弹幕游戏和一个基于微笑表情的贪吃游戏。
- 整个游戏皆从底层逻辑和游戏引擎开始设计，实现了包括碰撞检测，自动生成和人工智能等多种不同算法。当前并没有其它基于控制台和表情符的引擎。游戏可以实现像是表情符变成了游戏的有趣效果。
- 和乐师合作完成了游戏的音效。

移动端游戏

- 在移动端开发过数款游戏，熟悉 VR，地理位置服务，手机触屏和陀螺仪等。
- 完成过一个随机自动生成的岩浆奔跑游戏。
- 完成过多个多人线上游戏，前端基于 HTML5 和 Unity，后端基于 C# .NET Framework，Node.js。熟悉 Unity 的地理位置服务，DynamoDB 数据库和 GCP，AWS 等云平台上的虚拟机容器。
- 同其它领域如美术和乐师协作完成项目。

成就奖励

Queens ECE 年度机器人比赛，第一名

- 设计了一个灌篮机器人并赢得了比赛。设计并调试了控制系统，传感器和其它硬件。

National Science Foundation 研发经费

文章多次刊登 Medium 首页

CEMC Certificate of Distinction

- 加拿大滑铁卢大学举办的数学竞赛。

Google Code Jam 预选赛

- 后续赛事因为学业冲突未能参加。

社交活动

Queens Debating Union

- 英国议会式辩论模式。
- 锻炼了英文交流，公众演讲，团队协作和及逻辑思维能力。

Teach Access of Silicon Valley

- 学习了无障碍相关知识。
- 在活动中结交了许多志同道合人士。

Space Computing Conference

- Vint Cerf, Google 副总，互联网之父在此会议出席。
- 临时被决定要在会议上演讲，通过一个晚上准备并顺利完成演讲，内容为 Procedural Generation of Terrain at Planetary Scale。

大数据文摘 fast.ai 课程字幕

- 为大数据文摘制作 fast.ai 课程字幕。
- 为字幕内容进行翻译。

Shen Huang

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EDUCATION

California State University, Northridge, Northridge, California, USA

June 2020 (Expected)

MS in Computer Science

Queens University, Kingston, Ontario, Canada

June 2015

BS in Electrical Engineering

PROGRAMMING SKILLS

Backend & Software Development: C# (.NET Framework), Java (Apache Tomcat), Python, Node.js, Go.

Front End & Mobile Development: HTML/CSS/JavaScript, Flutter (Dart), Unity (C#), Ionic, Angular.

Cloud Development: AWS, GCP, MySQL.

Automated Testing: Selenium, Java Robot.

Embedded Systems: Arduino, C, Assembly, VHDL.

DATA SCIENCE SKILLS

Programming Languages: Octave, MATLAB, Python, Julia

Data Science Frameworks: scikit-learn (auto-sklearn), Keras (AutoKeras), WEKA (Auto-WEKA)

Data Science Knowledge: Probability & Statistics, Machine Learning, Deep Learning

Cloud Frameworks: GCP, AWS (SageMaker, Rekognition)

Visualization Frameworks: Matplotlib, Excel, Tableau

OTHER SKILLS

Languages: English (Native), Mandarin (Native).

Journalism: Curated Writer at Medium

WORK EXPERIENCE

Technical Journalist, Medium

Since May 2018

- Writer at Towards Data Science, freeCodeCamp.org, Frontend Weekly, Hacker Noon and The Startup.
- Curated articles in Machine Learning and Artificial Intelligence section on Medium.
- Articles published on front page of Pen Test Magazine upon request.
- Articles translated and published by 机器之心.

Graduate Assistant, California State University, Northridge

September 2018 - December 2019

- Performed research tasks such as literature review and paper formatting with LaTeX.
- Conducted research on Behavioral Biometrics.
- Assisted the professor with research tasks including code production.
- Created several applications with HTML/CSS/JavaScript & Node.js to collect data on mobile devices.
- Wrote automated test cases with Selenium.

Project Manager, California State University, Northridge

June 2019 - December 2019

- Coordinated meetings and helped other Master and Ph.D students in their research projects.
- Solved issues in Cloud ML, helped other students up to date with the trend of the field.

Teaching Assistant, National Science Foundation

January 2019 - December 2019

- Helped students in class to understand Cloud and Database.
- Helped students in class to understand Data Science models and workflow.

Software Engineer Internship, CETC Motor

July 2013 - September 2013

- Worked on a compiler to support floating point calculation by modifying the lexical and syntax analyzer.
- Added English and Chinese support for help documents.

Electrical Engineer Internship, State Grid Corporation of China

July 2012 - September 2012

- Designed and implemented a Java application to help managing error reports.
- Collaborated with six other engineers to validate the integrity of the communication system between the distribution station and the headquarters.

PROJECTS

Research Related Projects

- First paper accepted by IEEE HIS 2020
- Implemented a data collection mini-game interface with HTML5 Canvas, backend in both Node.js and Golang.

- Created a Social Media page in HTML/CSS/JavaScript to collect data, tested the social media page with Selenium.

Translation App

- Built a translation app in Flutter with Firebase backend, which compiles into both Android and iOS.
- Supports 20+ language translation and a chat room.
- Automated application testing with Selenium

Web Games

- Design and implemented several games and hide them as Easter Egg inside [<https://shenhuang.github.io/>]
- Created Unicorn Shoot and Cookie Munch solely with Emoji and div elements, which will activate when the user click on the Emojis on the page. Embedded the Space Shooting game inside Development Console via console log.
- Constructed the Game Engine from scratch, including Collision Detection, Procedural Generation, and Artificial Intelligence, as there are yet no available Game Engine for Emojis and Development Console.
- Collaborated with Musicians for music and sound effects.

Mobile Games

- Built multiple games in Unity for mobile platform, utilizing touch screen inputs, accelerometers, gyroscope, cameras and VR developments.
- Built a grid-based underground mining lava run game with procedurally generated level and lava automaton, mobile friendly with many UI design improvements built on easily adjustable custom UI objects.
- Built multiple multiplayer games with HTML5 and Unity front end with C# .NET Framework, Node.js backend. Familiar with Unity LBS, DynamoDB and Buckets in both GCP and AWS.
- Collaborated with people in other disciplines such as musicians, artists and writers.

AWARDS

Queens ECE Annual Robot Competition, 1st Place

- Designed a slam-dunk robot, code based on Arduino. Robot moves and grabs with servo motors utilizing Pulse Width Modulation. Robot senses the environment through touch sensor and infrared distance sensors, and therefore was designed to have a close loop control system to adjust the speed for optimal performance.

Grants from National Science Foundation

Curated Articles on Medium

CEMC Certificate of Distinction

- Math competition held by University of Waterloo.

Qualification Round, Google Code Jam

- Did not participate in the following rounds due to conflicts with schoolwork.

SOCIAL ACTIVITIES

Queens Debating Union

- Debated in the form of British Parliamentary.
- Improved skills in English communication, public speaking, teamwork and logical thinking skills.

Teach Access of Silicon Valley

- Learned about accessibility and how companies in Silicon Valley is currently working on it.
- Made several connections in the field who is interested in the same thing.

Space Computing Conference

- Conference featuring Vint Cerf, Vice President of Google, Father of Internet.
- Presented a publication on Procedural Generation of Terrain at Planetary Scale upon request.