James Coleman Gibson

GitHub/StackOverflow: jcolemang
gibsonjc@rose-hulman.edu
http://jcolemang.me
269–254–7340

Education

Bachelor of Science, Computer Science — May '18
Rose-Hulman Institute of Technology
GPA 3.79

Experience

Teaching Assistant *Rose-Hulman Computer Science Department* — Sept '15 – Current

- Assistant in Programming Language Concepts, Software Requirements Engineering
- Teaching students basics of programming language implementation
- Guiding students through important software engineering concepts

Intern *Groupon, Chicago* — May '17 – Aug '17

- Contributed to the design and implementation of Groupon's machine leaning platform
- Interfaced between Java, Python, and R to run data scientists' code on a Hadoop cluster
- Picked up stories alongside full time developers

Intern *Beckman-Coulter, Indianapolis* — June '16 – Aug '16

- Researched web technologies for a future Beckman-Coulter product
- Used Angular, RxJS, TypeScript to build a front-end prototype
- Investigated high availability database systems for feasibility

Developer *Rose-Hulman Ventures* — Dec '15 – May '16

- Maintained and developed a workers' compensation website
- Redesigned most frequently used page on site
- Wrote software used by paying clients

Projects

Dependently Typed Red-Black Tree *CSSE403, Programming Language Paradigms* — Jan '17 – Feb '17

- Wrote a Red-Black tree implementation which enforced color invariant at compile time
- Used GHC extensions to allow for dependent typing in Haskell

UML Generation *CSSE374, Software Design* — Nov '16 – Feb '17

- Constructed a static analysis and UML generation library for Java
- Designed the library to be extensible alongside two other team members

Scheme Interpreter *CSSE304, Programming Language Concepts* — Nov '16 – Feb '17

- Implemented a Scheme-like programming language using Scheme
- Added features to our language not present in R6RS

Handwritten Digit Classification *MA490, Data Mining* — Jan '16 – Feb '16

- Classified user input with neural network trained on MINST dataset
- Wrote a DBSCAN C extension for Python to segment text

Processor Design *Computer Architecture I* — Oct '15 – Nov '15

- Created and tested stack based multicycle processor using Xilinx
- Wrote processor emulator and assembler GUI to facilitate testing

Additional

Notable current classes include Deep Learning, Functional Design Patterns
Notable previous classes include Intro to Hadoop, Linear Algebra I & II, Operating Systems
Hobbies include art history, photography, reading, running
Linux as primary OS