

# Sebastian B. Koo

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Objective: Software Developer / DevOps / SRE / QA Engineer

## Education

<b>B.S. Computer Science</b> George Mason University (GMU) – Fairfax, VA	<i>Jan 2018 – May 2020</i> <b>GPA 3.6</b>
<b>A.S. Computer Science</b> Northern Virginia Community College (NVCC) – Loudoun, VA	<i>Jan 2016 – Dec 2017</i> <b>GPA 3.8</b>

## Skills

- *Languages:* Python, Java, Haskell, C, Bash, R, Lisp, Prolog, Assembly
- *Internet:* HTML, CSS, JSON, XML
- *Operating Systems:* Linux, Unix, macOS, Windows, Android
- *Databases:* SQL, Oracle, PostgreSQL, SQLite, JDBC
- *Tools:* IntelliJ IDEA, Eclipse, Android Studio, GitHub, JUnit, Maven, Gradle
- *Software Engineering:* UML, SDLC, and Agile & Waterfall Methodologies
- *Other:* Fluent in English and Korean

## Academic Projects *Jan 2018 – Present*

- **Python**
  - Domain Name System (DNS) Client, Augdentity, MaxTwo, ZipWith
- **Java**
  - *Algorithms:* Text Processor, Virtual Filesystem, Library Management, Drone Simulator
  - *Data Structures:* Generic Grid for 2D tables, Postfix Processor with Queue & Hash Table, Cyphertext Decoder with Encoding Trees Stacks, Color Blob Detector with Disjoint Sets
  - *Concurrent/Distributed Systems:* Key-Value Store & ZooKeeper, Distance Vector Routing
- **Android**
  - UI, Activities, Intents, Layouts, Threads, Location Services, Networking and JSON
  - Exercise Tracking app in SQLite & ListViews, Quiz app to practice data representation
- **Haskell**
  - Image Processing - Seam Carving, Musical Chairs, Monads: State, List, Maybe, IO
  - PrimeFactors, CoPrimes, Tribonacci, Reversed, Clockwise, TakeWhile
- **C**
  - *Low-Level application:* Omega I Invariant Cipher, DNA Sequencing, Food Delivery
  - *Systems programming:* Floating-Point Representation, Paged & Virtual Memory

## Work Experience

<b>Undergraduate Teaching Assistant</b> George Mason University – Fairfax, VA	<i>Aug 2018 – May 2020</i>
<ul style="list-style-type: none"><li>• Collaborated with several Graduate TAs, Instructors, and Professors</li><li>• Assisted dozens of CS students in classes and labs: Python, Java, CS Intro, Legal Ethics</li></ul>	

<b>Tutor</b> Northern Virginia Community College (NVCC) – Fairfax, VA	<i>Jan 2016 – Dec 2017</i>
<ul style="list-style-type: none"><li>• Tutored several hundred students in all the Math classes offered at NVCC</li><li>• Solved numerous problems with junior students up to 20 hours weekly</li></ul>	