NICHOLAS M. HANCOCK

Sunrise, FL USA

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EDUCATION

Georgia Institute of Technology   August 2018 -
- M.S. Computer Science

University of Florida   August 2014 - December 2017
- B.S. Computer Science
- B.S. Mathematics
- GPA: **3.4**/4.0 Phi Kappa Phi (top 10% of class)

SKILLS

Languages:	C (incl. POSIX), Python, Javascript, SQL, & Bash
	Familiar with: C++, Java
Software:	Git, Docker, LaTeX, React & Redux, Angular 1

BUSINESS EXPERIENCE

American Express   January 2018 -
Engineer
- **NEWS** - Real-time anomaly detection & visualization engine
   - Written in Node and React / Redux with Redis Lua scripts
   - Implemented anomaly detection statistics
   - Designed & implemented efficient and low-latency storage schema
- **OWLi** - Real-time customer request prediction engine
   - Designed & implemented high performance REST API in Python

American Express   Summer 2016 & 2017
Intern
- Developed a web application for data visualization
   - No previous Javascript experience
   - Written in Node & Angular 1, ported to React & Redux in 2017
   - Implemented backend state management for seamless multi-device usage
   - Implemented backend concurrent caching in NodeJS using promises
- Created Docker infrastructure for end-to-end testing and reproducibility

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PROJECTS

Writings / Technical Blog: blog.nicholasmhancock.com

github.com/nmhancock
- **Language**   Aug 2017 -
   - Senior Project; APL derivative
   - Focused on implicit parallelism and architecture independence
- **Inverse Congruential Generator (ICG)**   Nov 2016 - Dec 2016
   - Random number generator
- **Darray**   Jan 2016 -
   - Generic dynamic array implementation
   - Allows switching between malloc() and persistent, file-backed mmap() backends
- **Sieve of Eratosthenes**   Jul 2014 -
   - Multithreaded prime sieve
   - Exploits algorithmic side-effects to limit inter-thread synchronization

Current Version: blog.nicholasmhancock.com/resume