

Khoa Nguyen

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EDUCATION

THE COLLEGE OF WOOSTER

B.A., COMPUTER SCIENCE & MATHEMATICS

Aug 2014 - Dec 2017 | Wooster, OH
Cumulative GPA: 3.97 / 4.0

SKILLS

PROGRAMMING

Over 3000 lines:

C++

Over 1000 lines:

C • R • Java • Python

Familiar:

SQL • Scheme • Bash

• MATLAB • Go • Ruby

• git • Kali Linux • Metasploit

• AWS • GCP

COURSEWORK

RELATED COURSES

Machine Intelligence + Project

Algorithm Analysis + Project

Operating Systems

Computer Networking

Software Engineering + Project

Programming Languages

Data Structures & Algorithms + Lab

Probability & Statistics I, II + Project

Advanced Linear Algebra

Real Analysis I

Functions of Complex Variables

Differential Equations

(Research/Teaching Asst & Grader)

Algorithm Analysis


User Interface Design

Linear Algebra

Data Structures & Algorithms

LINKS

 github.com/nguyen-khoa

 [linkedin.com/in/khoanguyen18](https://www.linkedin.com/in/khoanguyen18)

HONORS & AWARDS

ΦBK Phi Beta Kappa

ΠME Pi Mu Epsilon

EXPERIENCE

INTUIT, INC. | SECURITY ENGINEER INTERN - THREATINTEL TEAM

May 2017 - Aug 2017 | San Diego, CA

- Building and maintaining infrastructure to automate security testing based on the Kill Chain model using Golang, JIRA, AWS, and Google Cloud Platform.
- Scaling the current infrastructure to handle more complex kill chain scenarios.

WESTERN RESERVE GROUP | AMRE RESEARCH CONSULTANT

May 2016 - July 2016 | Wooster, OH

- Automated the data mining process of auto insurance data from Microsoft Access to Excel with SQL and VBA, under a simple, intuitive user interface.
- Led a team of 3 to the project's completion 2 weeks before the deadline.
- Replaced the long manual process of extracting data for varying time periods.

GOODYEAR TIRE & RUBBER | AMRE RESEARCH CONSULTANT

May 2015 - July 2015 | Wooster, OH

- Wrote 1/3 of the source code of Automated X-ray Image Analysis Software (AXIAS), used daily by Goodyear in tire inspection.
- Designed algorithms for image filtering and analysis with C++ and OpenCV.
- Implemented statistical tests to increase accuracy and consistency.
- Reduced the time for inspecting tire images from 30 min down to 5-6 min.

PROJECTS

PREDICT STOCK PRICES WITH TIME SERIES ANALYSIS & MACHINE LEARNING IN R

MATH-329 Probability & Statistics II | CSCI-310 Machine Intelligence

- Created an ARIMA time series model combined with a Restricted Boltzmann Machine (RBM) in R to predict the prices of stocks.
- Ongoing work includes adding more attributes to the data for finer predictions

BLOCK CIPHERS

CSCI-200 Algorithm Analysis

- Investigated the theories behind block ciphers, essential in data encryption.
- Wrote a C++ proof-of-concept substitution-permutation network, a structure used in most modern block ciphers such as AES.

\LaTeX ON ANDROID: TEXMOB

CSCI-230 Software Engineering - Mobile Computing

- Created a fully functional prototype of an Android app to write and compile \LaTeX
- Designed all of the user interface and some of the back-end data storage.

EXTRACURRICULARS

GHC Scholar & Poster Presenter

Participant - Honorable Mention
Participant

Co-Founder & Vice President

Resident Director

Trustee

Grace Hopper Celebration of Women
in Computing 2016

Mathematical Contest in Modeling 2015, 2016

HackMIT 2016, OHI/O 2015 hackathons

Wooster Computer Science Club

Office of Residence Life

Jenny Investment Club