David Etler

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Education

Dec. 2017 Bachelor of Science in Computer Engineering – New Jersey Institute of Technology

GPA: 4.0 out of 4.0

Albert Dorman Honors Scholar

May 2015 Associate of Science in Engineering – Ocean County College

GPA: 3.95 out of 4.0

Graduated Summa Cum Laude; Phi Theta Kappa Member

Skills and Proficiencies

• Compiled programming languages including Java and C/C++

• Scripting languages including Python and JavaScript

• Web design with HTML, CSS, and jQuery

• UNIX Systems, Shell Scripting, and basic SQL

• Git version control system

• Android app development in Android Studio

Programming Projects

RSA Encryption Program

• Implemented RSA encryption algorithm in Java with a classmate

• Included message encryption, decryption, key-pair generation, message signing, and signature verification

• Built an Android application to drive the program

Image Compression Algorithm

• Designed and implemented an algorithm for image compression in MATLAB

• Used discrete cosine transform to efficiently encode images, similar to JPEG

Orbital Mechanics Simulator

• Wrote a light-weight C program to numerically solve the N-Body problem

• Used numerical differential equation techniques to simulate the mechanics of orbiting bodies

• Implemented a user interface to render orbiting bodies in 2D with OpenGL

Employment History

Oct 2015 - Tutor and Mentor, Newark Kids Code

Present New Jersey Institute of Technology, Newark, New Jersey

- Teaching elementary school students from Newark about computer science and technology
- Assisting students in creating games and animations in the Scratch programming language

Oct 2014 - Peer Tutor, Mathematics Center

May 2015 Ocean County College, Toms River, New Jersey

- Tutored students in mathematics and physics
- Worked with students one-on-one and in study groups

Activities

- Member of IEEE, New Jersey Institute of Technology Student Chapter
- Participant in NJIT's 2015 Hackathon: wrote an Android chatroom application in 24 hours on a team of four
- Writer for New Jersey Institute of Technology's Albert Dorman Honors College Newsletter
- Helping feed Newark's homeless every Friday through the Newark Newman Club's Extra Mile program

Awards and Certifications

May 2015 OCSPE Engineering Scholarship - Ocean County Society of Professional Engineers

May 2015 Scholarly Horizons Honors Scholarship – Ocean County College Foundation Board

March 2015 International Tutor Training Program Certification - College Reading and Learning Association