Entrepreneurial Opportunities & Skills

Susan H. Rodger and Ayanna Howard

Ayanna Howard

- Chair, School of Interactive Computing (IC)
- Linda J. and Mark C. Smith Endowed Professor
- CTO/Founder, Zyrobotics
- Previous: NASA Robotics Researcher
- Research: Human-Robot Interaction and AI

College of Computing Selects Ayanna Howard to Lead School of Interactive Computing

DECEMBER 4, 2017 • ATLANTA, GA

Following a national search, the Georgia Tech College of Computing has selected **Ayanna Howard**, professor and Linda J. and Mark C. Smith Chair in the School of Electrical and Computer Engineering (ECE) to chair its School of Interactive Computing.

Howard, who is also associate chair for faculty development in ECE, will succeed Professor **Annie Antón**, who served in the role from 2012-17. Antón finished her five-year term in June 2017 and remains a professor within the school. Professor **Amy Bruckman**

GEORGIA TECH.

Zyrobotics
freedom through technology

BUSINESS INSIDER

TECH   FINANCE   POLITICS   STRATEGY

23 of the most powerful women engineers in the world

Julie Bort ✉ 🐦 G+
May. 15, 2015, 4:15 PM   🔥 529,440

FACEBOOK   LINKEDIN   TWITTER   EMAIL   COPY LINK

No. 19: Zyrobotics' Ayanna Howard

Ayanna Howard, Founder & Chief Technology Officer, Zyrobotics.

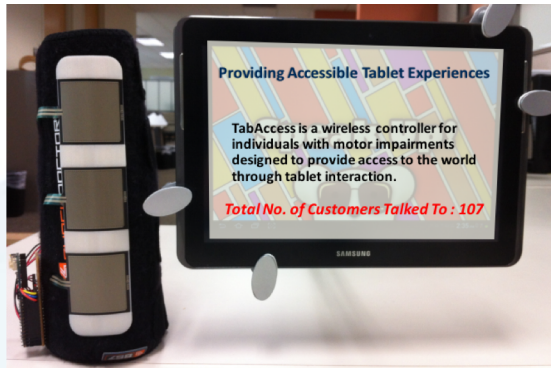Howard is a professor at Georgia Tech specializing in the intersection of machine learning and robotics,

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My Entrepreneurship Journey

Providing Accessible Tablet Experiences

TabAccess is a wireless controller for individuals with motor impairments designed to provide access to the world through tablet interaction.

Total No. of Customers Talked To : 107

- Assistive Technology (AT) to enable access to our tablet-based therapy games
- Participated in NSF I-Corps

Zyrobotics develops AI-powered STEM tools and learning games for early childhood education

Hands-On STEM Products

Cloud-Based AI & Analytics

STEM Apps and eBooks

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@robotsmarts

Traction

Over 500K Apps Downloaded to Date

80 Institution/School Adopters

MOU with California School District

9 Distributors & Resellers
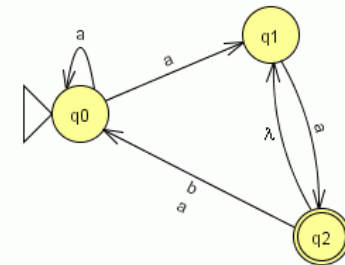
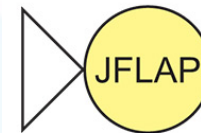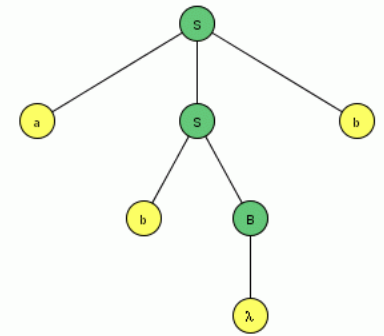Patent Protected: Patents 9120027, 9310904, 9846843

My Entrepreneurship Journey

Susan Rodger

- Professor of the Practice, Duke Univ
- Previously Assistant Prof, Rensselaer P.I.
- Developed JFLAP from 1990-current
  - Educational Software for Automata and Formal langages
  - Over 10 versions of JFLAP
  - Always given JFLAP away for free!
- Curriculum materials for Alice programming
  - Free for anyone

Adventures in Alice Programming - Durham, North Carolina Region

Adventures in Alice Programming and Other Workshops
Duke University, Durham, NC

Home
Apply
Free Tutorials
Example
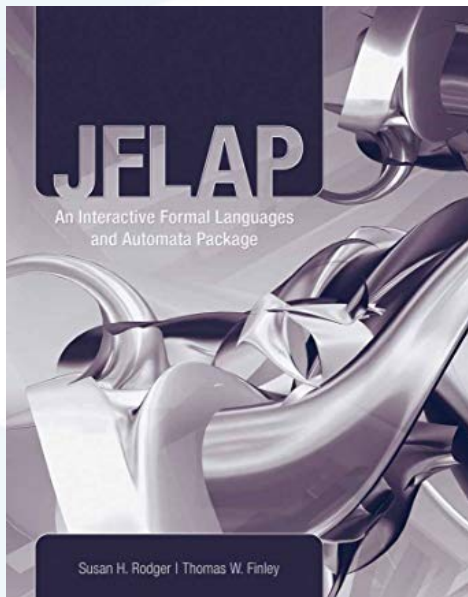Worlds/Videos

JFLAP

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Books and Online Courses

- Book on JFLAP – royalties
- Online Courses - Duke Coursera
  - Support – Duke provides a team to build course
  - Extra work, not part of Teaching load at Duke
  - Royalties – Duke/Coursera split, Duke splits with instructors

Susan Rodger

JFLAP

An Interactive Formal Languages and Automata Package
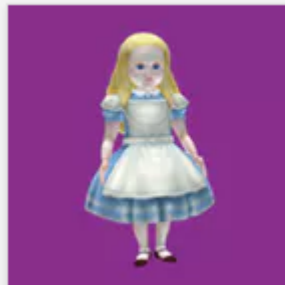
Susan H. Rodger I Thomas W. Finley

Java Programming and Software Engineering Fundamentals

Duke University

SPECIALIZATION

★★★★☆ 4.6 (5,925) | 200K students

Beginner

Introduction to Programming and Animation with Alice

Instructors: Susan H. Rodger, Stephen C

Draft

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Success!

- JFLAP
  - Used worldwide in over 160 countries
  - Courses: automata theory, discrete math, compilers, artificial intelligence
  - Google analytics (only since 2012)
    - Over 2 million pageviews, Over 589,000 sessions
  - Name is important! Searchable?
  - Awards! Monetary even! Satisfaction!

- Coursera Java Specialization
  - 5 short courses, launched in 2014
  - Over 1 million looked at the courses
  - Over 25,000 have completed one of the courses
    - Meet them around the world!

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Success — what people think it looks like

Success — what it really looks like

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Today's Conversation

- What is *entrepreneurship*?
- What are the benefits?
- Full- or part-time entrepreneurship?
- How might you take the leap?
- Q&A

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Why Entrepreneurship?

Defined…

- Entrepreneurs notice and take advantage of opportunities to use their skills
  - Our experiences
  - Your experience — please share!
- Characteristics of Entrepreneurs
- Intrapreneurship vs Entrepreneurship

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Why Entrepreneurship? (cont)

Benefits?

- Career and learning opportunities
  —Broadened perspectives
  —Global thinking
- Flex your creativity and problem solving abilities
- Follow your passions
- Be unconventional

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Why Entrepreneurship? (cont)

Other considerations…

- Success or failure rests with YOU
- You need lots of skills (business, accounting, management)
- Pay may not come immediately
  - *develop* a business plan: distinguish yourself/ your business and understand risks
  - *ensure* you have sufficient capital
  - *plan* for the end goal (i.e., acquisition, scaling)
- Expect to work incredibly hard

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Activity: Find a partner and Come up with as many uses as possible for a scarf. (*Tip: Consider a different customer for each use case.*)

Exercise: Think Like an Entrepreneur

- Search for lots of solutions
- Experiment, and ask the right questions
- Keep your customer in mind
- Be creative at brainstorming

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How does entrepreneurship work?

- Full-time vs part-time
    - devote all time and resources growing business
    - earn capital/investment
- Set goals and track progress
- Consider partnerships
    - co-founder?
    - board of directors?

Think: *If you want to go **fast**, go alone; if you want to go **far**, go together* (African proverb)

Making the leap!

- Accept that failure is possible (and okay!), and also leads to success; be flexible

- Decide what good, service you will offer

- Secure your company name
    - rules varies by state, bur process is standard
    - consult accountant, attorney

OR

- Start thinking like an entrepreneur!

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QUESTIONS?

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