

SenselCs Internship

Ella Sheppard

BACKGROUND

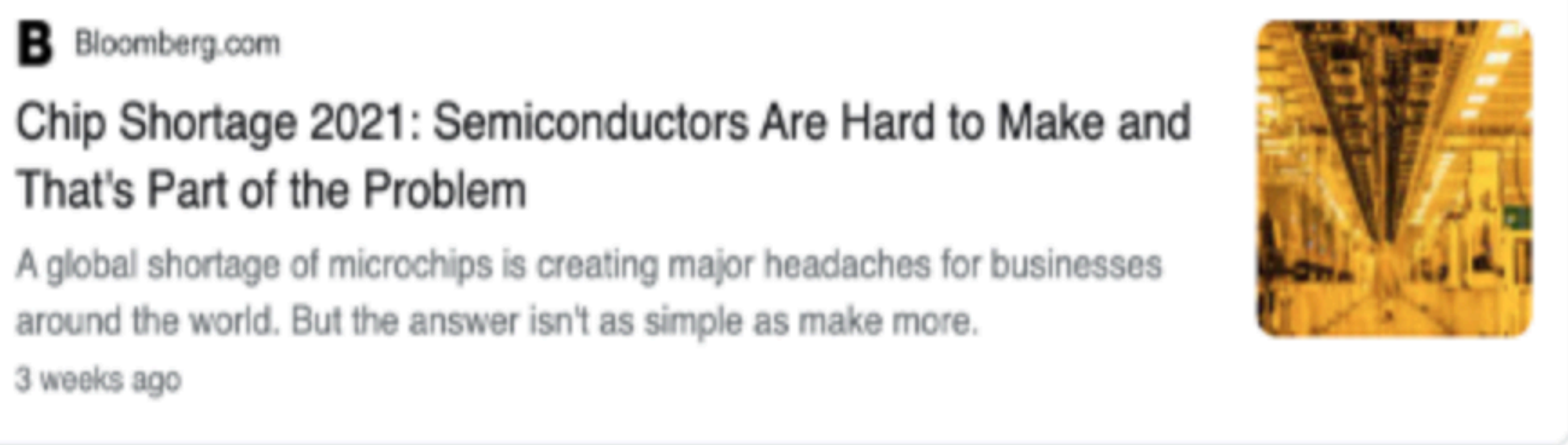
- Business Development Research Intern at SenselCs
- Located in Columbus, OH
- Office space in a Rev1 Ventures' facility
- Company is engineering innovation in integrated circuit design to advance:
 - Imaging capabilities
 - Secure 5G
 - Trusted microelectronics
 - Performance in high radiation environments
- Leadership has unique design and engineering experience
- Small business: 8 employees
- Connected through Ohio Third Frontier Diversity and Inclusion Technology Internship Program
- I started in December 2020



A SenselCs chip shown on a penny for size reference.

INTRODUCTION

- SenselCs designs integrated circuits
- Integrated circuits are used for: cars, phones, microwaves, cameras, computers and more
- Foundries build the chips
 - Chips contain semiconductor materials
 - This process is very expensive
- Semiconductors have been in the news recently because of a global shortage
- Semiconductor shortage impacted our work and increased foundry wait times



Written by: Ian King, Adrian Leung, and Demetrios Pogkas. Published May 6, 2021.

ON THE JOB

Responsibilities

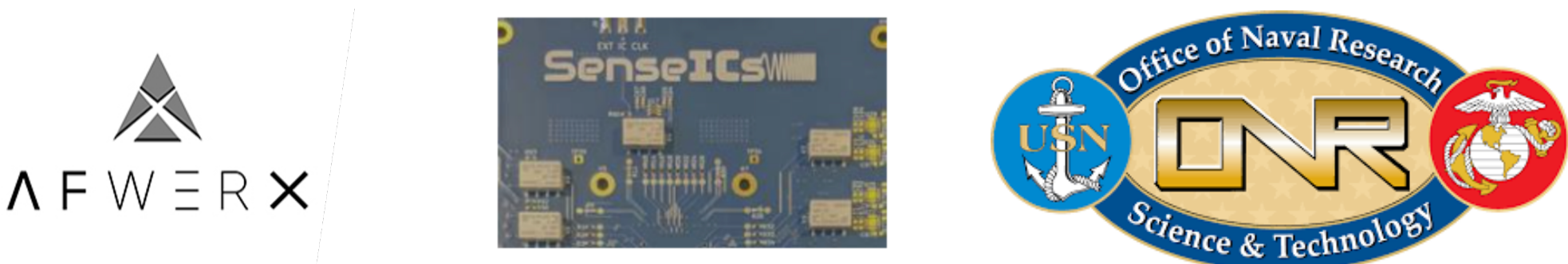
- Funding
 - Research
 - Tracking
 - Background information
 - Commercialization potential
 - Program contacts
- Public Relations
 - Identify contacts
 - Make connections
- Meetings
 - Weekly internal
 - External: Program contacts, potential collaboration, proposal preparation

Department/Agency	Office	Name	Revised ID	Match (rank/word)	Deadline	Proposal needed	Description of opportunity	SAB link	Contract type	POC name	POC contact
DOD	DAWIA	Advanced Research Project	H00012150013	541765	March 23, 2021	Innovative Research Proposal	Advanced Research Project (ARP) is a program of the Defense Advanced Research Projects Agency (DARPA) that provides funding for innovative research and development projects. The program is open to small businesses and academic institutions. The program is designed to support the development of new technologies that will be used in the future. The program is open to small businesses and academic institutions. The program is designed to support the development of new technologies that will be used in the future.	https://www.darpa.mil/program/advanced-research-project	48 month program	SAB Coordinator	EW@SenselCs.com
DOD	DAWIA	Advanced Research Project	H00012150014	541716	12/30/2020	Phase 1	Advanced Research Project (ARP) is a program of the Defense Advanced Research Projects Agency (DARPA) that provides funding for innovative research and development projects. The program is open to small businesses and academic institutions. The program is designed to support the development of new technologies that will be used in the future. The program is open to small businesses and academic institutions. The program is designed to support the development of new technologies that will be used in the future.	https://www.darpa.mil/program/advanced-research-project	not to exceed 6 months	SAB Coordinator	EW@SenselCs.com
DOD	MDA	Advanced Research Project	H00012150015	541716	12/30/2020	Phase 1	Advanced Research Project (ARP) is a program of the Defense Advanced Research Projects Agency (DARPA) that provides funding for innovative research and development projects. The program is open to small businesses and academic institutions. The program is designed to support the development of new technologies that will be used in the future. The program is open to small businesses and academic institutions. The program is designed to support the development of new technologies that will be used in the future.	https://www.darpa.mil/program/advanced-research-project	not to exceed 6 months	SAB Coordinator	EW@SenselCs.com
DOD	NSA	Advanced Research Project	H00012150016	541716	12/30/2020	Phase 1	Advanced Research Project (ARP) is a program of the Defense Advanced Research Projects Agency (DARPA) that provides funding for innovative research and development projects. The program is open to small businesses and academic institutions. The program is designed to support the development of new technologies that will be used in the future. The program is open to small businesses and academic institutions. The program is designed to support the development of new technologies that will be used in the future.	https://www.darpa.mil/program/advanced-research-project	not to exceed 6 months	SAB Coordinator	EW@SenselCs.com

A screenshot from the funding tracker I created

ACCOMPLISHMENTS

- In my time at SenselCs, we were awarded two funding contracts:
 - AFWERX (Air Force Innovation team)
 - Office of Naval Research



SenselCs in the News

FEATURES

Columbus company wins \$2M-plus from DOD for integrated circuit design house

Cynthia Bent Findlay For Columbus CEO
Published 3:13 p.m. ET Jul. 3, 2021

Columbus CEO TechTalk Column covering SenselCs' founders, funding, and background. Article by: Cynthia Bent Findlay, published July 3, 2021.

SenselCs Awarded \$50,000 Contract from AFWERX to Expand 5G Technology Solutions

Building on a previous \$200,000 award win, new contract will advance Air Force access to innovative 5G electronics

FOR IMMEDIATE RELEASE: April 21, 2021
Contact: Olivia Bullock
Program Manager
olivia@senselcs.com
800-432-0957

Press release from SenselCs after AFWERX award. Released April 21, 2021.

Ohio State ECE alumni earn \$50,000 to create Air Force 5G electronics

Published May 18, 2021

SenselCs' AFWERX win published on the OSU ECE website on May 18, 2021. Written by Ryan Horns.

RESEARCH

- Semiconductor industry sustainability
- Chose 8 companies publicly traded in U.S. or Canada based on their 12-month trailing revenue
- Companies Include:
 - Intel
 - Texas Instruments
 - Micron Technology
 - Taiwan Semiconductor Manufacturing Co.
- Organized data with the Community Capitals Framework
 - Made diagram below to inform team of factors in each category



REV1 COHORT

- Professional development sessions
 - Implicit Bias
 - Planning for the future
- Discussion with Rev1 CEO Tom Walker
- Rev1 Mentor: Andrew Ewing
 - Manager of Corporate Connections
 - Met weekly
- Intern networking session
- Access to The Elite Leadership Alliance platform
 - Leadership topics in the news
 - Practice opportunities
 - Courses



Rev1 Team Members



Mentor Andrea Ewing (L) and Director of Entrepreneur Programs Alison Lopriore (R)

REFLECTIONS

- Enjoyed the challenges and benefits of a startup company:
 - Unanticipated tasks
 - Close-knit team
- Want to experience being on the support side of startups (Rev1 Ventures)
- Will pursue other startup opportunities
 - Interested in environmental technology
- If you are interested in a startup company, be flexible and ready to learn

SenselCs Team

